

Service Manual

PCM Digital Ensemble SX-PR700 /PR700M



Photo: SX-PR700M

(M), (MC), (XM), (EN), (EH), (EF), (EZ), (EW), (EA),
(EP), (EK), (XL), (XR), (XS), (XD), (XT), (X), (XP)

AREAS

(M): U.S.A.	(EK): the United Kingdom
(MC): Canada	(XL): New Zealand
(XM): Mexico	(XR): Australia
(EN): Norway, Sweden, Denmark, Finland	(XS): Malaysia
(EH): Holland, Belgium	(XD): Saudi Arabia, Hong Kong, Kuwait
(EF): France, Italy	(XT): Taiwan
(EZ): Germany	(X): Thailand, Indonesia, Iran, U.A.E., Panama, Argentina, Peru, Brasil
(EW): Switzerland	(XP): Philippines
(EA): Austria	
(EP): Spain, Portugal, Greece, Singapore, South Africa	

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

■ Specifications

KEYBOARD	88 KEYS
SOUND GENERATOR	PCM
MAXIMUM NUMBER OF NOTES PRODUCED SIMULTANEOUSLY	64 NOTES
PLAY STYLE	PIANO MODE, KEYBOARD SPLIT, AUTO PLAY CHORD
PIANO	4 SOUNDS : GRAND, UPRIGHT, ELECTRIC, MODERN
SOUNDS	196 SOUNDS GROUP : PIANO & E PIANO, HARPSI & MALLET, GUITAR, SPECIAL PERC, STRINGS & VOCAL, ORGAN & ACCORDION, BRASS, SAX & REED, FLUTE, SYNTH LEAD, BASS, SYNTH PAD, KEYBOARD PERC, PERC & EFFECT
CONDUCTOR	RIGHT1, RIGHT2, LEFT SELECT
PEDAL	SUSTAIN, SOSTENUTO, SOFT
DIGITAL EFFECT	○
DSP EFFECT	○
DIGITAL REVERB	○
BRILLIANCE	○
TRANSCOPE	G-C-F#
RHYTHMS	128 RHYTHMS × 4 VARIATIONS GROUP : 8 BEAT, ROCK, 16 BEAT, FUNK & FUSION, SOUL & DISCO, TRAD DANCE, BIG BAND & SWING, JAZZ COMBO, COUNTRY, U.S. TRAD, SHOW TIME, MARCH & WALTZ, LATIN 1, LATIN 2
METRONOME	○
CONTROLS	MAIN VOLUME, RHYTHM VOLUME, BALANCE/MUTE, START/STOP, INTRO & ENDING 1, INTRO & ENDING 2, FILL IN 1, FILL IN 2, COUNT INTRO, SYNCHRO START, TEMPO/PROGRAM, TAP TEMPO, SPLIT POINT
AUTO PLAY CHORD	BASIC, ADVANCED 1, ADVANCED 2, PIANIST, ON BASS, MUSIC STYLE ARRANGER

Technics

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ONE TOUCH PLAY	○ (ONE TOUCH PLAY/MUSIC STYLE SELECT)
PIANO STYLIST	○
TECHNI-CHORD	○
PANEL MEMORY	2 BANKS (A/B) × 5, SET
SEQUENCER	16 TRACKS RESOLUTION : 96 PULSES PER QUARTER-NOTE STORAGE CAPACITY : APPROX. 30000 NOTES (10 SONGS MAX.) INPUT MODES : EASY RECORD, REALTIME RECORD, STEP RECORD FUNCTIONS : TRACK ASSIGN, EDIT, SONG SELECT/NAME, PUNCH RECORD, MEDLEY
COMPOSER	5 PARTS : BASS, ACCOMP 1, ACCOMP 2, ACCOMP 3, DRUMS STORAGE CAPACITY : APPROX. 10000 NOTES INPUT MODES : EASY COMPOSER, REALTIME RECORD, STEP RECORD FUNCTIONS : COMPOSER CHORD MAP, MODE SELECT, PATTERN COPY, LOAD SINGLE COMPOSER PATTERN, SEQ TO COMP COPY, COMPOSER LOAD MEMORY : 3 BANKS × 10 (VARIATION 1-4, INTRO 1, 2, FILL IN 1, 2, ENDING 1, 2)
MEMORY & CONTROL	INITIAL, DISK LOAD, DISK SAVE, DIRECT PLAY, PEDAL SETTING, FLOPPY DISK FORMAT, MEDLEY, PANEL MEMORY MODE, MUSIC STYLE ARRANGER MODE
SOUND SETTING	PART SETTING (VOLUME, PAN, EFFECT, SUSTAIN, KEY SHIFT, TUNING, PITCH BEND RANGE, OTHERS), MIXER, OVERALL TOUCH SENSITIVITY, MASTER TUNING, KEY SCALING, TECHNI-CHORD TYPE, LEFT HOLD, REVERB SETTING, DSP EFFECT SETTING
MIDI	BASIC CHANNEL, CONTROL MESSAGE, OCTAVE SHIFT & LOCAL ON/OFF, REALTIME MESSAGES, COMMON SETTING, MIDI PRESETS, INPUT/OUTPUT SETTING, GENERAL MIDI, P. MEM OUTPUT
EXTERNAL MEMORY	BUILT-IN 3.5 inch FLOPPY DISK DRIVE FOR 2HD (1.44 MB), 2DD (720 KB)
DISPLAY	LCD (320 × 240 DOTS) PAGE, CONTRAST, EXIT, DISPLAY HOLD
HELP	○
DEMO	○
TERMINALS	PHONES, LINE OUT (R/R+L, L), AUX IN (R/R+L, L), MIDI (IN, OUT, THRU), PEDAL IN
OUTPUT	60 W × 2
SPEAKERS	16 cm × 2, 6.5 cm × 2, MONITOR SPEAKER (13 cm × 6 cm) × 2
POWER REQUIREMENT	280 W, 185 W (NORTH AMERICA AND MEXICO) AC120/220/240 V 50/60 Hz AC120 V 60 Hz (NORTH AMERICA AND MEXICO) AC230-240 V 50/60 Hz (EUROPE, AUSTRALIA, NEW ZEALAND AND PHILIPPINES)
DIMENSIONS (W × H × D)	139.7 cm × 105 cm × 61.4 cm (55" × 41-11/32" × 24-3/16")
NET WEIGHT	76 kg (167.6 lbs.)
ACCESSORIES	STAND, AC CORD

*Specifications are subject to change without notice for further improvement.

WARNING

To prevent the risk of fire, smoke, or electrical shock and to ensure safe operation, please be sure to follow the safety guidelines below.

- At places where special caution is required, the necessary safety precautions are clearly labeled or printed, for example, on the cabinet, or on the part concerned. Please follow these safety precautions, and also those listed in the Owner's Manual.
- Parts which have a  mark in the circuit diagram or in the parts list are essential for safety. When replacing these parts, be sure to use only the specified parts.
- Use the specified types for internal wiring (double-insulated wiring, etc.).
- When replacing parts on the AC primary side (power transformer, electric switch, electrical cord, noise-prevention condenser, etc.), wind the lead wire and secure it by soldering.
- Do not let the wiring come into contact with heat-emitting devices (fuse resistor, radiator plate, etc.).
- When replacing the wiring, make sure that it is not in contact with the unfinished or rough edge of a part.
- When replacing the power cord (except for the plug-in type), tug it from various directions to confirm that it does not slip out of place.
- Spacing
If soldering was done on the AC primary circuit, confirm that the interval between the soldered terminals or between the terminal and surrounding metallic parts is at least the minimum required (between the primary circuit and the chassis: at least 6.5 mm; between primary circuit terminals: at least 4.0 mm; between primary circuit terminals and secondary circuit terminals: at least 6.5 mm).

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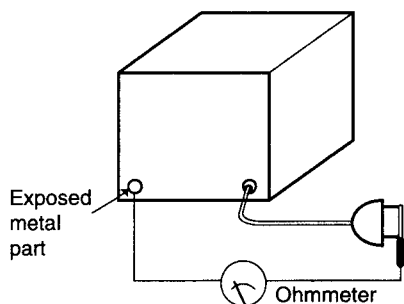
SAFETY PRECAUTION

● Safety Precaution

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only the manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

● Insulation Resistance Test

1. Unplug the power cord and short the prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screw heads, connectors, control shafts, handle brackets, etc. Measurements should range from 4 MΩ to infinity for all exposed parts.

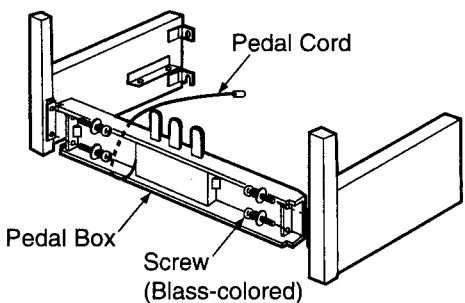


Resistance = 4MΩ to ∞

HOW TO ASSEMBLE THE PIANO

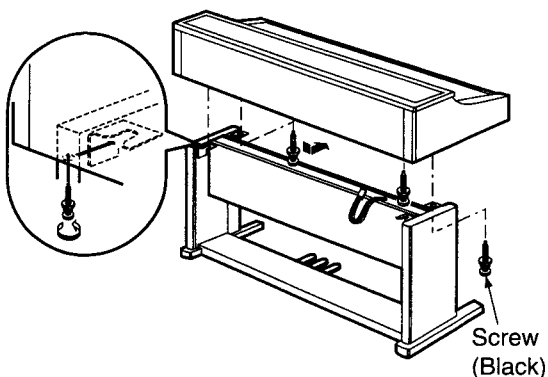
To prevent the piano unit from falling off the stand, secure it firmly with the screws.

- 1 Assemble the right and left side planks and the pedal box with the 4 black-colored screws.
- Losen the pedal cord, stowed on the inner side of the pedal box, and extend it.



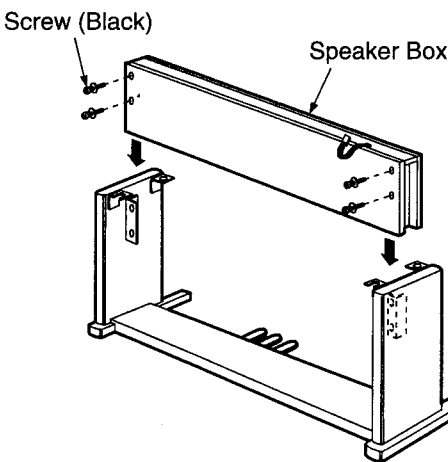
[Fig. 1]

- 3 Place the piano body on the stand and secure it with 4 black screws.



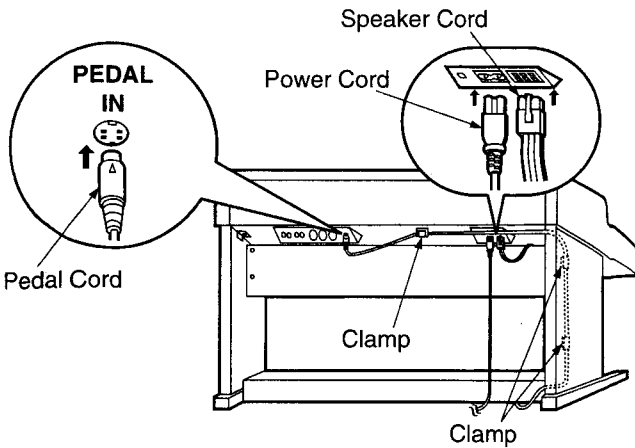
[Fig. 3]

- 2 Place the stand upright and mount the speaker box onto the L-shaped brackets with 4 black screws.



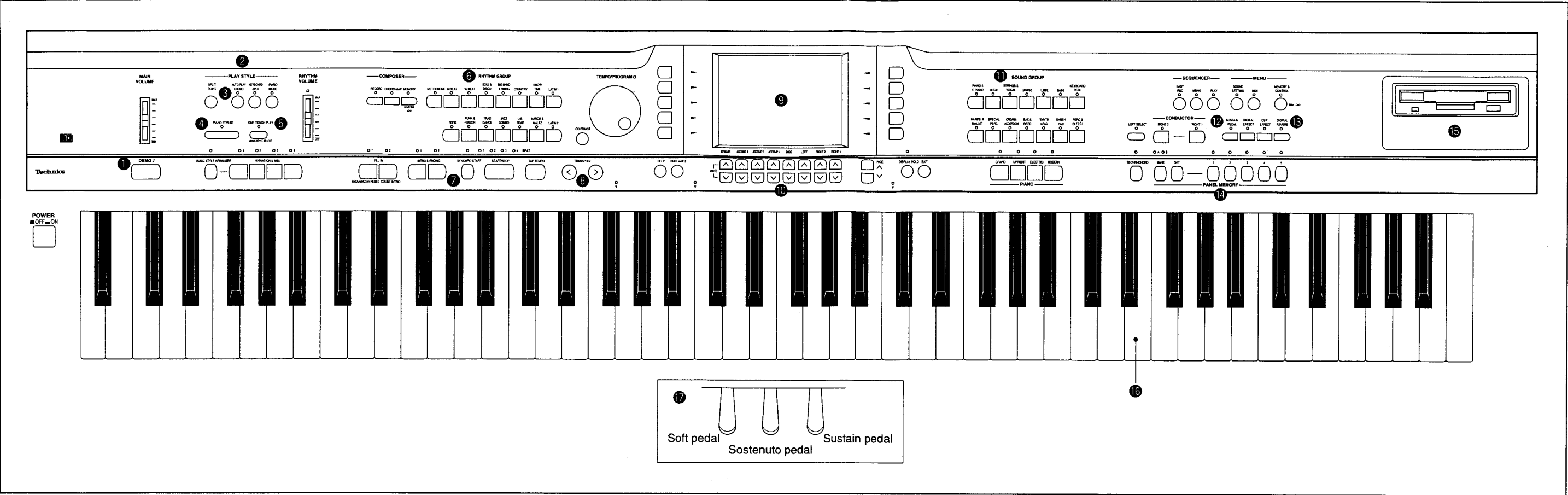
[Fig. 2]

- 4 Connect the pedal cord, power cord and speaker cord to the terminals located on the rear of the piano unit as shown below.



[Fig. 4]

ARRANGEMENT OF CONTROL PANEL



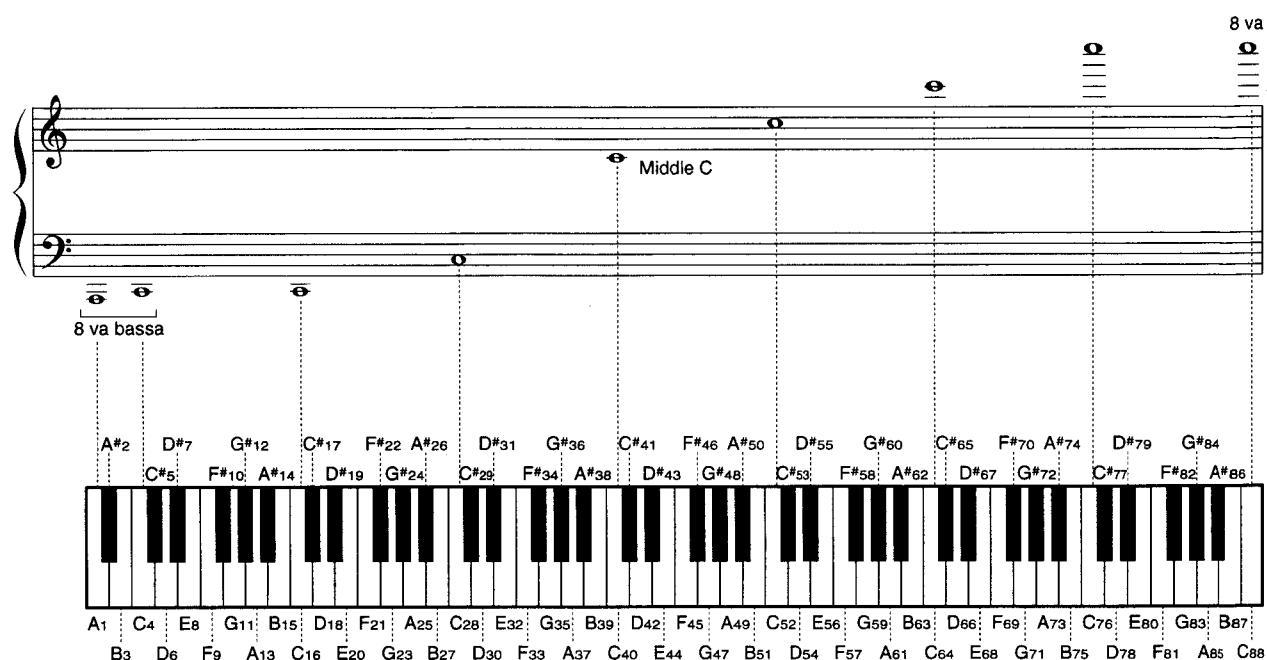
- 1 DEMO**
Listen to programmed demonstration tunes which impart the charm of individual sounds and rhythm patterns.
- 2 PLAY STYLE**
Select standard piano or one of various performance style. (select either a conventional keyboard or a split keyboard.) The location of the split point can be set at G2, C3 or C4 with the **SPLIT POINT** button.
- 3 AUTO PLAY CHORD**
When you play a chord on the keyboard, an accompaniment pattern which matches the selected rhythm is automatically produced. Select from four modes, according to your level of expertise.
- 4 PIANO STYLIST**
For performances using piano sounds, just select a piano style, and in seconds an appropriate panel registration is set, including the accompaniment pattern.
- 5 ONE TOUCH PLAY/MUSIC STYLE SELECT**
This special feature allows you to easily set all the panel settings, including sounds and effects, in just seconds.

- 6 RHYTHM GROUP**
Various automatic rhythm patterns are stored in the permanent memory.
- 7 Rhythm control**
The **FILL IN 1, 2** buttons are used to insert a fill-in pattern during the rhythm performance. Use the **INTRO & ENDING 1, 2** buttons to start a song with an intro pattern or finish with an ending pattern. **START/STOP** is used to start and stop the rhythm instantly. Or turn on the **SYNCHRO START** button to start the rhythm by pressing a key on the left side of the keyboard. Regulate the tempo of the automatic rhythm with the **TEMPO/PROGRAM** dial.
- 8 TRANPOSE**
C is the standard setting, but you can raise or lower the key of the entire keyboard in semi-tone steps across an entire octave.
- 9 DISPLAY**
During the normal performance mode, the selected rhythm, selected sound and tempo etc. are displayed. When setting the functions for the **SEQUENCER, COMPOSER, MIDI** and others, the relevant information is displayed.

- 10 Volume balance**
The volumes for the **DRUMS, BASS, ACCOMP 1, 2, 3, LEFT** and **RIGHT 1, 2** parts are adjusted with their respective volume balance buttons.
- 11 SOUND GROUP**
You can select from 4 piano sounds. Or choose the sound of various instruments.
- 12 Effects**
DIGITAL EFFECT gives the sound greater depth and breadth. **DSP EFFECT** change the quality of the sound. **SUSTAIN PEDAL** enables or disables the operation of the sustain pedal.
- 13 DIGITAL REVERB**
Turn the **DIGITAL REVERB** button on to add reverberation to the sound.
- 14 PANEL MEMORY**
Set the desired sounds, effects, split point, volume settings, rhythm, tempo, etc. with the panel controls. Then store the panel settings in one of the programmable memories. While you play, the touch of one button recalls the panel settings instantly.

- 15 Disk Drive**
The Disk Drive allows you to store up to 20 performances on a floppy disk.
- 16 Keyboard**
This keyboard features Touch Response, by which you control the volume by playing the keys harder or softer.
- 17 Pedals**
The sustain pedal and sostenuto pedal apply sustain effects, and the soft pedal works as a damper.

KEYBOARD RANGES



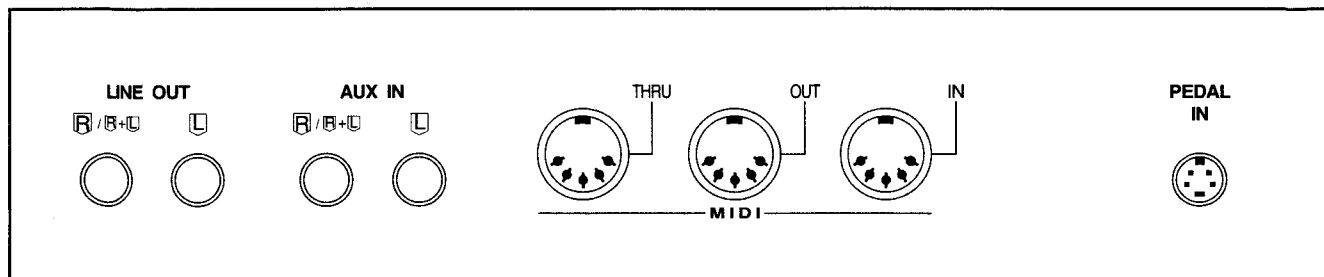
INITIAL SETTING

The following procedure resets all programmable settings, functions and memories to their initialized (factory-preset) status. Use this procedure if the buttons, keys, etc. malfunction, or when you wish to reset the memories and functions.

1. Turn off the **POWER** button.
2. While pressing the three lower leftmost buttons in the **RHYTHM GROUP** section (**ROCK**, **FUNK & FUSION** and **TRAD DANCE**) at the same time, turn the **POWER** button on again.

TERMINALS

(on the rear panel)



LINE OUT (output level 1.5 Vrms, 600 Ω)

By plugging into an external high-power amplifier, the sound can be reproduced at a high volume. (Use the **R/R+L** terminal when outputting monaural sound.)

AUX IN (input level 0.5 Vrms, 6 k Ω)

Other instruments such as a rhythm machine or sound module can be connected to the piano so that the sound is output from the piano. To receive monaural sound, connect the other instruments to the **R/R+L** terminal.

MIDI (Musical Instrument Digital Interface)

MIDI is the standard specification that enables connection to equipments such as synthesizers and personal computers.

IN : The terminal that receives data from external equipment.

OUT : The terminal that transmits data from this instrument to external equipment.

THRU: The terminal that transfers data from the **IN** terminal directly to other equipment.

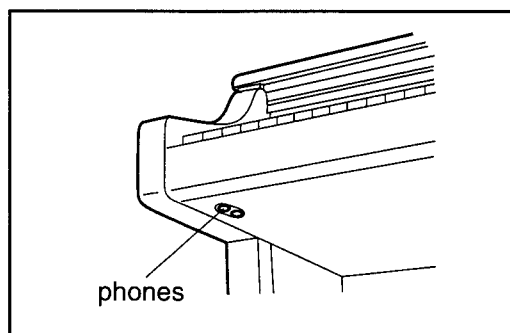
- Use a 5-pin DIN cord (less than 15 m long) for these connections.

PEDAL IN

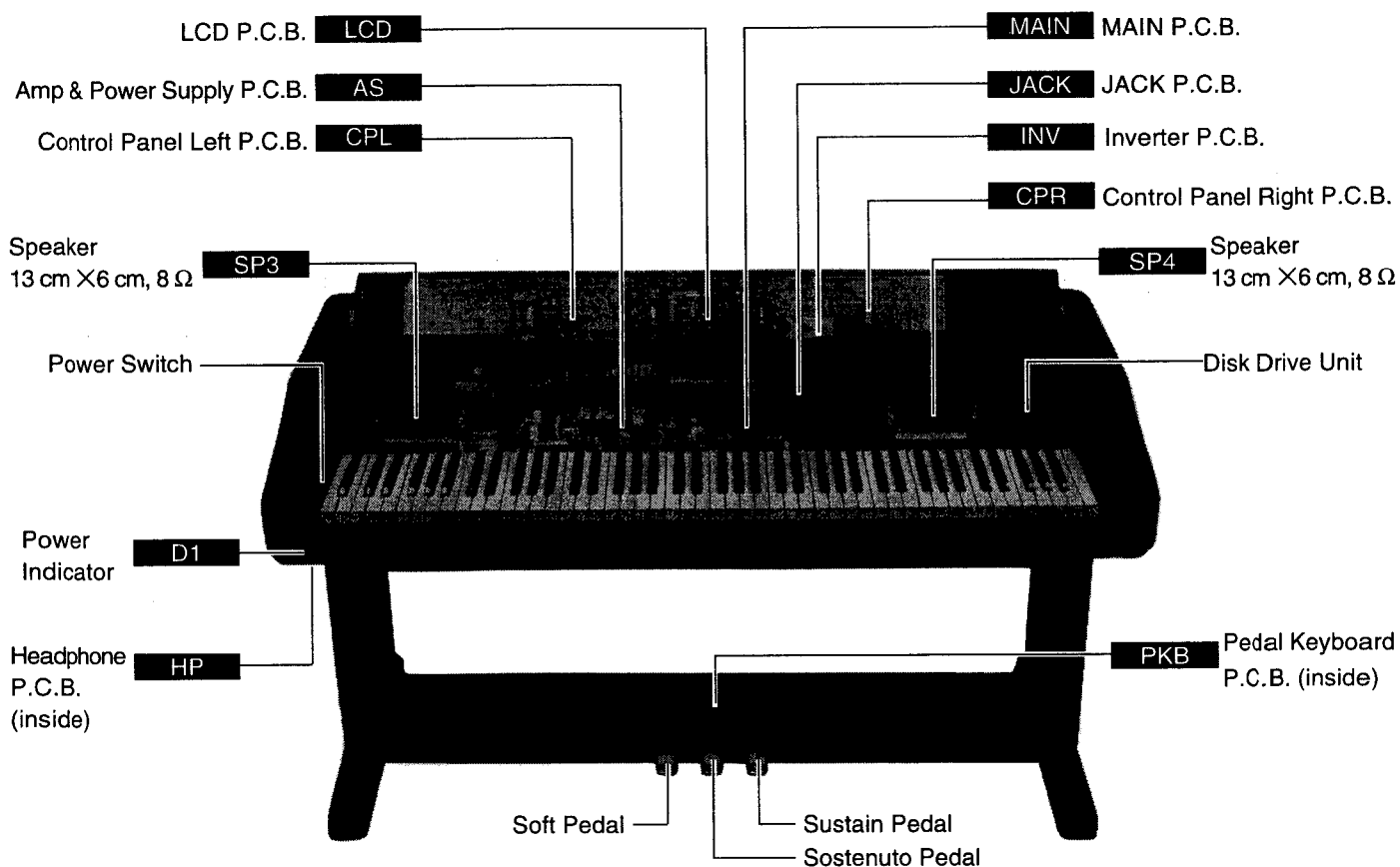
Connect the included pedal.

phones×2

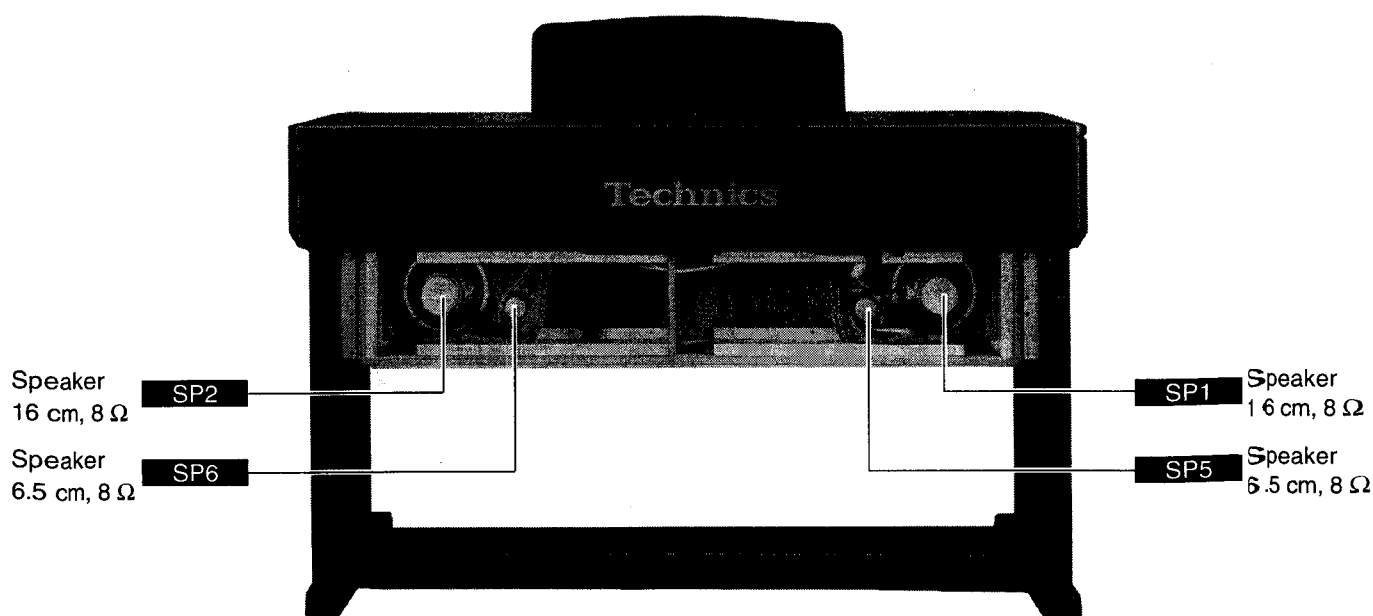
For silent practice, headphones may be used. When plugged in, the speaker system is automatically switched off, and sound is heard only through the headphones.



PARTS LOCATION



[Photo-1]

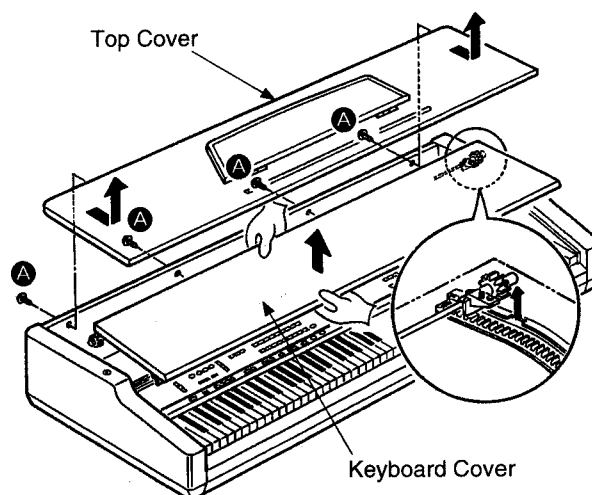


[Photo-2]

DISASSEMBLY INSTRUCTIONS

1 Removing the top cover

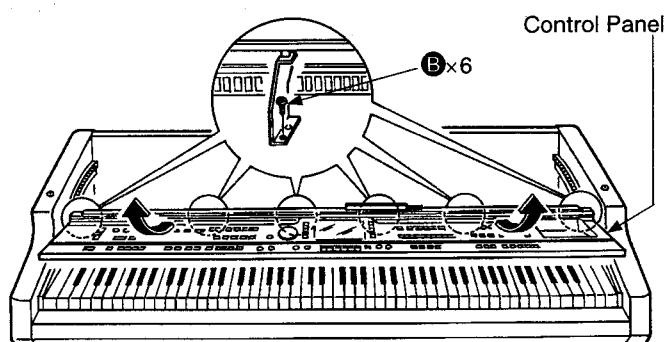
1. Remove the top cover affixing screws (A 4 pcs.).
2. Slide the top cover forward and lift up (as shown by the arrows).



[Fig.5]

3 Removing the control panel

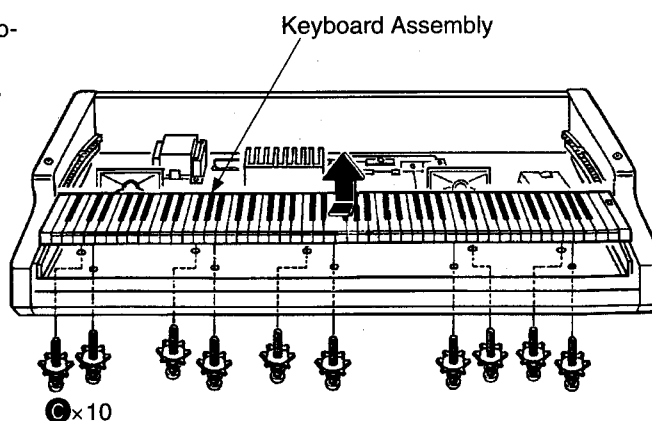
- Pull out the connectors on the printed circuit boards.
1. Remove the keyboard cover (see step [2]).
 2. Remove the control panel affixing screws (B 6 pcs.).
 3. Remove the control panel as shown in Fig. 6.



[Fig.6]

4 Removing the keyboard assembly

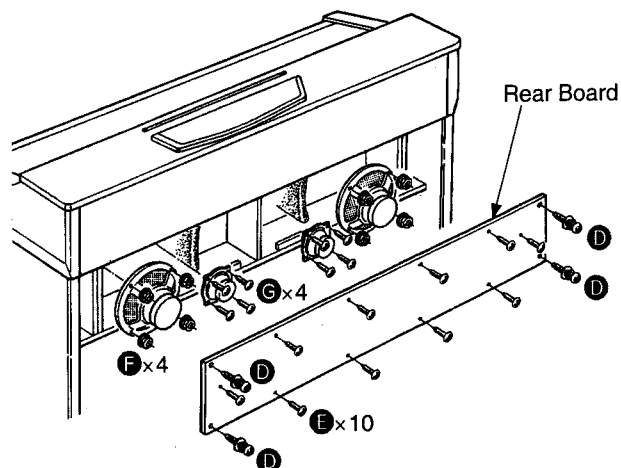
1. Remove the control panel (see step [3]).
2. Remove the keyboard assembly affixing screws located on the bottom of the cabinet (C 10 pcs.).
3. Remove the keyboard assembly as shown in Fig. 7.



[Fig.7]

5 Removing the speakers

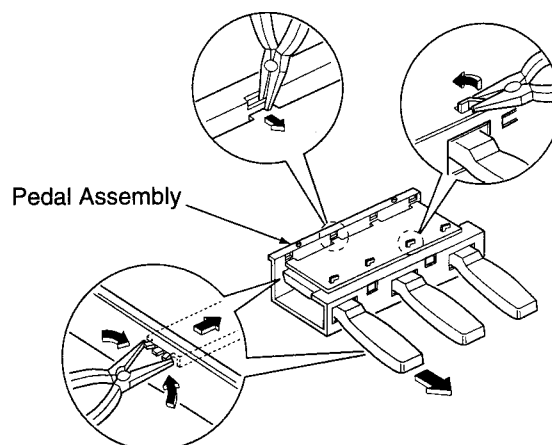
1. Remove the mounting screws for the rear board of the speaker box (D 4 pcs. and E 10 pcs.).
 - Be careful that the speaker box does not fall off, since it comes free of the L-shaped bracket of the stand.
2. Remove the mounting nuts for the 16 cm speakers (F 4 pcs. each).
3. Remove the mounting screws for the 6.5 cm speakers (G 4 pcs. each).



[Fig.8]

6 Disassembly of the pedal assembly

1. Remove the pedal assembly from the pedal box.
2. Disassemble the pedal assembly as shown in Fig. 9.



[Fig.9]

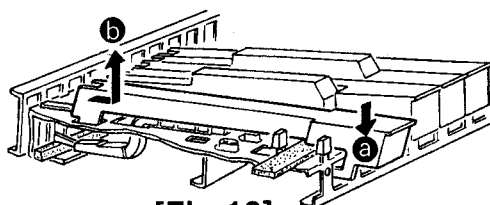
7 Key (s)

Disassembly

1. Remove the keyboard assembly (see step 4).
2. To release the key claw.
 - a Press the front of the key downward slightly.
 - b Press the rear of the key forward gently.
3. To remove the key, lift it as shown in Fig. 10.

NOTE:

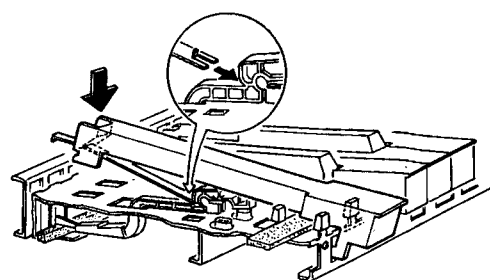
- The key claw is easily broken. Do not apply undue force. Should a key claw break, it can still be used; however, a replacement is recommended.
- If a black key is to be replaced, it is necessary to remove both adjacent white keys.



[Fig.10]

Assembly

1. Insert the front part of the key into the chassis.
2. Insert the plate spring into the hammer notch as shown in Fig. 11.
3. While slowly lowering the key into the chassis, insert the plate spring into the notch at the rear of the key.
4. Carefully insert the key into the opening in the chassis and slide the key towards the rear to lock it in place.



[Fig.11]

8 Removing the printed circuit boards

- Remove the top cover (see step 1).
- Pull out the connectors on the printed circuit boards.

MAIN P.C.B.

1. Remove the MAIN P.C.B. mounting screws (H 2 pcs.).
2. Release the claws of the 2 P.C.B. holders.

AS P.C.B.

1. Remove the AS P.C.B. mounting screws (I 2 pcs.).
2. Release the claws of the 5 P.C.B. holders.

JACK P.C.B.

1. Remove the MAIN P.C.B.
2. Remove the JACK P.C.B. mounting screws (J 3 pcs.).
3. Remove the ground wire holding screws (K 2 pcs.).

HP P.C.B.

1. Remove the keyboard assembly (see step 4).
2. Remove the HP P.C.B. mounting screw (L 2 pcs.).
3. Remove the ground wire holding screw (M 1 pc.).
4. Remove the headphone jack mounting nuts (N 2 pcs.).

ACP P.C.B.

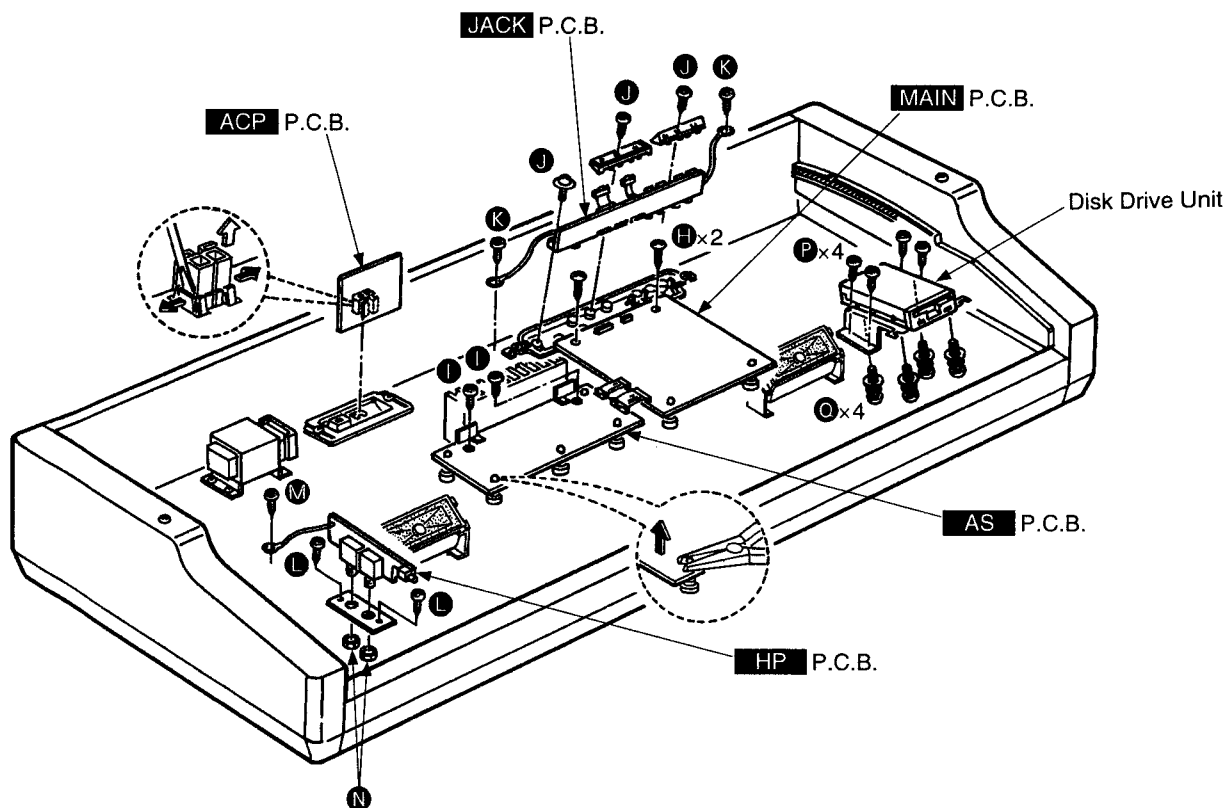
- Release the claws of the AC IN connector bracket.

LCD P.C.B.

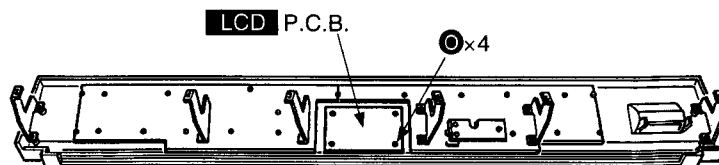
1. Remove the control panel (see step 3).
2. Remove the LCD P.C.B. mounting screws (O 4 pcs.).

9 Removing the Disk Drive unit

1. Pull out the Disk Drive unit from the connector.
2. Remove the chassis on which Disk Drive unit is attached (P 4 pcs.).
3. Remove the Disk Drive unit mounting screws (Q 4 pcs.).



[Fig.12]



[Fig.13]

SYMPTOMS WHICH APPEAR TO BE SIGNS OF TROUBLE

The following changes in performance may occur in the Technics Digital Ensemble but do not indicate trouble.

		Phenomenon	Remedy
Sounds and effects		The buttons, keys, etc. malfunction.	• Turn off the POWER button once, then turn it on again. If this procedure is not successful, turn off the POWER button once. Then, while pressing the three lower left buttons in the RHYTHM GROUP section (ROCK, FUNK & FUSION and TRAD DANCE) at the same time, turn the POWER button on again. (Note that, in this case, all programmable settings, functions and memories return to their factory-preset status.)
		No sound is produced when the keys are pressed.	• The MAIN VOLUME is at the minimum setting. Adjust the volume with the MAIN VOLUME control. • The volumes for the selected parts are set to the minimum levels. Use the balance buttons to set the volumes of the relevant parts to appropriate levels. • The part is muted. • The local control for a part performed on the keyboard is set to OFF. Set the local control to ON.
		Only percussive instrument sounds are produced when the keyboard is played.	• In the SOUND GROUP section, the KEYBOARD PERC button is on.
		The volume is very low when the keyboard is played.	• The volume setting in the SEQUENCER contents is very low. Follow the INITIAL procedure to reset the settings.
		Some sounds cannot be selected.	• When the GENERAL MIDI status is set to on, The sounds which can be selected and operation which can be executed are limited. Turn the GENERAL MIDI status off to return the instrument to its normal operation.
		The sound you hear is different from the sound you selected.	• This sometimes occurs when you play back SEQUENCER or COMPOSER data which was created on a different model, or when MIDI data is received from a connected instrument. Select the desired sounds again.
		The sustain does not work even when the sustain pedal is depressed.	• The sustain pedal is not connected. Connect the pedal cord firmly to the PEDAL IN terminal on the back of the instrument. • When the SUSTAIN PEDAL button is off, the sustain does not work even when the pedal is depressed. Turn on the SUSTAIN PEDAL button.
		The sostenuto pedal and soft pedal do not operate properly. For example, when the soft pedal is depressed, the rhythm starts or a fill-in is played.	• Different functions can be programmed in these pedals. You can return the pedals to their original functions by turning off the instrument once, or by using the PEDAL SETTING mode.

Phenomenon		Remedy
Rhythm	The rhythm does not start.	• The RHYTHM VOLUME sliding controller is set to OFF. Set the volume to an appropriate level. • The DRUMS volume is set to the minimum level. Use the balance buttons to set the DRUMS volume to an appropriate level. • A rhythm in COMPOSER MEMORY with no stored pattern was selected. Select a different rhythm. • The PLAY button in the SEQUENCER section is on. When you are not playing back the SEQUENCER performance, turn off the PLAY button. • CLOCK is set to MIDI. Set CLOCK to INTERNAL. • The rhythm does not work when the GENERAL MIDI mode is set to ON. Turn the GENERAL MIDI status off to return the instrument to its normal operation.
	No sound is produced for the automatic accompaniment.	• The RHYTHM VOLUME sliding controller is set to OFF. Set the volume to an appropriate level. • A rhythm in COMPOSER MEMORY with no stored pattern was selected. Select a different rhythm.
AUTO PLAY CHORD	No sound is produced for the automatic accompaniment, or only the sounds of some parts are produced.	• An ACCOMP part does not sound if its corresponding volume is set to the minimum level. Use the respective balance buttons to set the ACCOMP 1, 2 and 3 volumes to appropriate levels.
	Storage is not possible.	• The remaining memory capacity of the SEQUENCER is 0. Follow the SONG CLEAR or TRACK CLEAR procedure to erase the memory.
SEQUENCER	Multi-track storage is not possible.	• The playback track has been selected, but the START/STOP button has not been pressed. On the recording display, the track with a REC mark is the track which is ready for recording; a track with a PLAY mark is a track which is ready for playback. To record one track while listening to another (playback) track, press the START/STOP button to begin playback.
	The playback measure indication is different from when the performance was recorded.	• The number of measures corresponds to the time signature of the rhythm selected at the start of recording. To change the rhythm in the middle of the song, record the rhythm change in the RHYTHM part.

Phenomenon		Remedy
COMPOSER	Storage is not possible.	• The remaining memory capacity of the COMPOSER is 0.
	Setting the time signature and number of measures is not possible.	• The time signature and number of measures cannot be changed for a pattern which is currently recorded in the COMPOSER . If you wish to change the time signature and/or measure data, first follow the procedure to clear the memory.
	The playback timing of the rhythm pattern is different from the timing with which it was recorded.	• The QUANTIZE function was on when the pattern was recorded and the timing was automatically corrected. Set the quantize level to a smaller note unit or to OFF when recording.
Disk Drive	The Disk Drive produces a noise during recording or playback.	• This occurs when the Disk Drive is reading a disk. It does not indicate a problem.
	When the procedure to load from a disk is performed, the contents of this instrument's memory are erased.	• When performing the load operation from a disk, this instrument's memory changes to that of the data loaded from the disk. If you wish to preserve a song which is stored in this instrument's memory, save it on a disk before performing the load procedure.
Other	Noise from a radio or TV can be heard.	• This sometimes occurs when electrical equipment such as a radio or TV is used near the instrument. Try moving such electrical equipment further away from the instrument. • The sound may be coming from a nearby broadcast station or amateur radio station. If the sound is bothersome, consult your dealer or service center.
	The cabinet becomes warm during use.	• This instrument has a built-in power source that heats the cabinet to some degree. This is not an indication of trouble.

ERROR DISPLAY

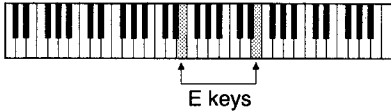
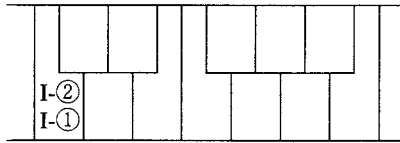
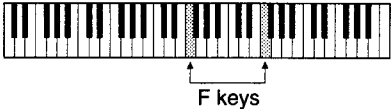
No.	Contents
00	The data on the disk that you are using is for a different product.
01	An error has occurred while the disk was loading. Please try again!
02	There is no disk in the Disk Drive.
03	The file that you tried to load is empty.
05	An error has occurred while the disk was saving. Please try again!
06	The disk that you are using is write protected. Please remove the write protection and try again.
07	The disk that you are using is full. Please use another disk.
08	An error has occurred while the disk was formatting. The disk that you are using may be faulty. Please try formatting another disk.
10	The data is already copy protected.
20	A problem has occurred with your SEQUENCER Data. This might be due to a damaged or faulty disk.
21	Memory full
22	It is necessary to press PUNCH OUT to complete this procedure.
23	It is impossible to change the time signature because it has already been set in the existing tracks.
24	A rhythm track already exists. It is impossible to assign two tracks to rhythm.
25	It is only possible to change the velocity on a melody track.
26	It is only possible to merge melody tracks. Tracks such as rhythm, chord and control cannot be merged.
27	It is only possible to copy melody tracks. Tracks such as rhythm, chord and control cannot be copied.
28	This song is too long to be saved as a MIDI file.
29	The MIDI file that you have tried to load exceeds the memory capacity of this instrument and cannot be played. The SEQUENCER memory has been cleared.

No.	Contents
30	It is not possible to change the time signature or measure length of a COMPOSER pattern after it has been recorded. If you want to proceed, you must first clear the entire COMPOSER pattern.
31	The time signature of the pattern from which you are copying is different from the COMPOSER memory that you are using. Either: Change the time signature of the COMPOSER memory or: Copy from a pattern that has the same time signature
32	Memory full
43	The file that you are trying to load was saved on a previous PR series. It is only possible to load using the "ALL" option.
47	Please select a preset pattern.
55	Special tracks such as CHORD, RHY and CTL exist in the song from which you are copying and are incompatible with the destination song because it is in the GM mode.
56	AUTO PUNCH recording has been unsuccessful because SEQUENCER operation was interrupted before the PUNCH OUT measure was reached.
57	The COMPOSER pattern you have chosen has a different time signature or number of measures from the other patterns in this COMPOSER CHORD MAP. All of the COMPOSER patterns used in a COMPOSER CHORD MAP must have the same time signature and number of measures.
58	The song that you have tried to load exceeds this instrument's available memory and cannot be loaded. The selected song memory has been cleared. Please clear existing songs in the instrument's memory using SONG CLEAR to make more memory available, and try again.
59	RKB and LKB are special tracks for compatibility with sequencer data from previous PR products. They cannot be edited or recorded on.
60	RKB and LKB are special tracks which cannot be used in conjunction with RIGHT 1, RIGHT 2, LEFT and APC tracks. Please re-assign RKB and LKB to any other part and try again.

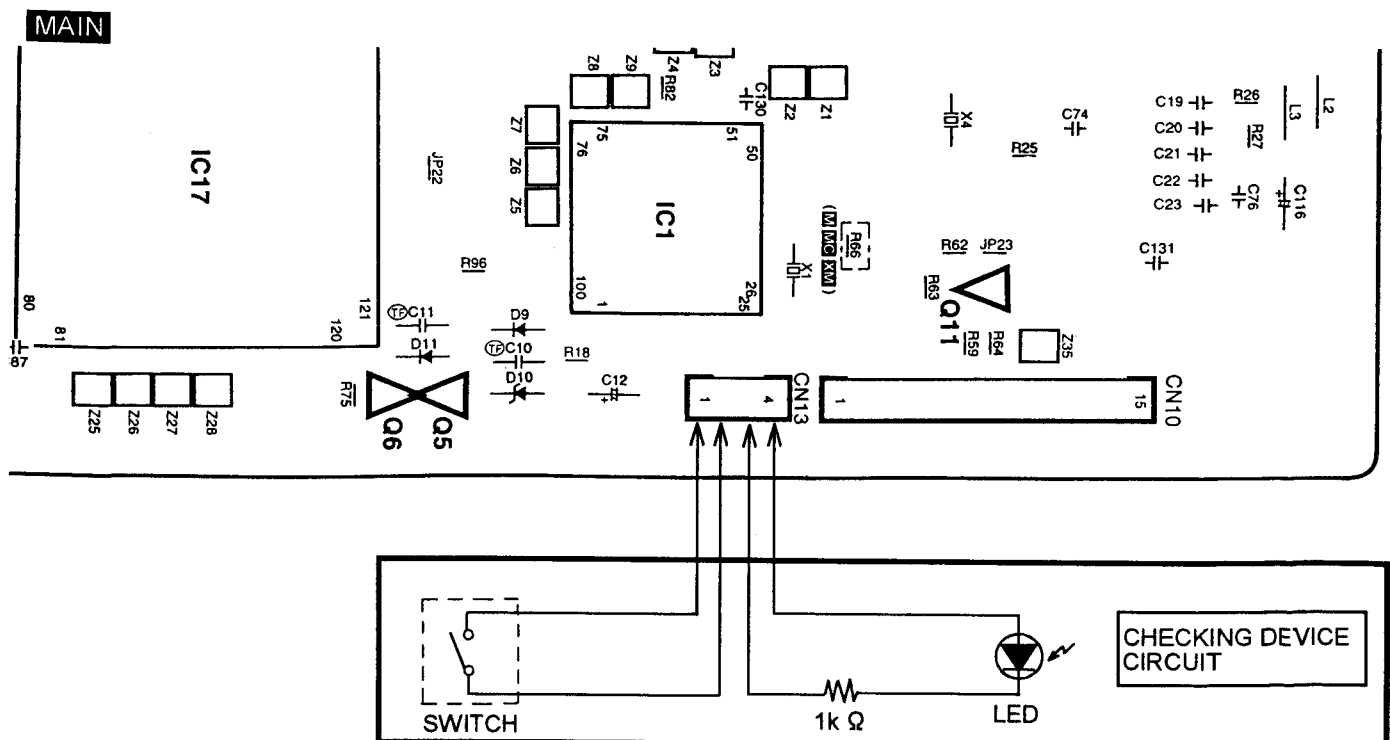
ABOUT THE SELF-DIAGNOSTIC FUNCTION

This model has some self-diagnostic capabilities. When set to the self-diagnostic mode, operation of various components can be verified by following the procedures in the chart below.

No.	PCB	TEST MODE	Procedure
1	MAIN	RAM (IC8), ROM (IC2-5, 7) check	1. Connect the CHECKING DEVICE (refer to page I-17) to CN13 on the MAIN P.C.B., and turn on the CHECKING DEVICE switch. 2. Turn on the power switch.
		When the power switch is turned on, the LED of the CHECKING DEVICE flashes 8 times. The first 4 flashes are for the RAM check, and the latter 4 flashes are for the ROM check. The order of the LED flashes correspond to the respective IC numbers as shown below. If an IC is defective, the corresponding flash time is longer. Examples 1. RAM OK, ROM OK 2. RAM OK, ROM (IC7) defective 3. RAM (IC8) defective, ROM OK NOTE : ● indicates short flash time ■ indicates long flash time	
2	CPL CPR	CPU (IC1) check	1. Connect the CHECKING DEVICE to CN13 on the MAIN P.C.B. (The Checking Device switch should be off). 2. Press and hold the two D keys shown below, and then turn on the power switch.
		When the power switch is turned on, the LED of the CHECKING DEVICE flashes 4 times. The order of the LED flashes corresponds to the CPU (IC) on the respective P.C.B.s as shown below. If an IC is defective, the corresponding flash time is longer. 1. CPL (IC1), CPR (IC1) OK 2. CPL (IC1) defective 3. CPR (IC1) defective NOTE : ● indicates short flash time ■ indicates long flash time	

No.	PCB	TEST MODE	Procedure
3	MAIN	Wave ROM check MAIN: IC18, IC22	Press and hold the two E keys shown below, and then turn on the power switch. 
		When set to the self-diagnostic mode, the Wave ROM outputs a sine wave. The Wave ROMs correspond to the keyboard keys as shown in the diagram to the right. When a key is pressed, the corresponding sine wave sound is produced. If no sound is produced, or if the sound is distorted, the Wave ROM corresponding to that key is defective. • The key number indicates the Wave ROM number. (I-①:IC18, I-②:IC22) 	
4	CPL CPR	Control Panel LED check	Press and hold the two F keys shown below, and then turn on the power switch. 
		Press the buttons on the control panel and confirm that the corresponding LEDs light.	
5	LCD	LCD check	Press and hold the two G keys shown below, and then turn on the power switch. 
		When set to the self-diagnostic mode, the test pattern is shown on the display. Monitor the display to confirm that the characters appear correctly.	

■ Connection between serving CHECKING DEVICE and MAIN P.C.B.



PRECAUTIONS BEFORE SERVICING

■ Precautions for measuring of the output waveforms.

1. The waveform was measured with a "National Digital Storage Oscilloscope VP-5730A". Therefore the waveforms of musical tone signals shown may differ somewhat due to the difference in the timing of triggering.
2. Since the 1/10 test probe is used, the indicated voltage value on the bottom part of each waveform photo is 1/10 of the actual value (e.g. 0.2 V/cm should be 2.0 V/cm).
3. To measure the waveforms, first set this unit to the self-diagnostic mode (refer to page I-17, No. 3). The Wave ROM output will then be output as a sine wave to facilitate the servicing check.

■ Important safety notice:

Components identified by a  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

■ Symbolic Marks

The symbolic marks for resistors and capacitors which used in this circuits are classified as following TABLE-1 and TABLE-2.

1. RESISTORS

- Resistors without symbolic mark are FIXED CARBON FILM RESISTORS (ERD-type).
- All resistors are 1/4 WATT, $\pm 5\%$ TOLERANCE unless otherwise designated in schematic diagrams.

(TABLE-1)

SYMBOL	SPECIFICATION	SYMBOL	SPECIFICATION
Ⓕ	Fixed Carbon Film Resistors "FLAME-PROOF" (ERD—F—type)	Ⓕ	Fixed Metal Film Resistors "FLAME-PROOF" (ERX—type)
Ⓕ	Fixed Wire Wound Resistors "FLAME-PROOF" (ERF—type)	Ⓕ	Fuse Type Fixed Metal Oxide Film Resistors "FLAME-PROOF" (ERQ—type)
Ⓕ	Fixed Metal Oxide Film Resistors "FLAME-PROOF" (ERG—type)	Ⓕ	Fuse Type Fixed Carbon Film Resistors "FLAME-PROOF" (ERD2FC—type)
Ⓖ	Fixed Metal Film Resistors (Precision and High Stability) (ERO—type)		

2. CAPACITORS

- Capacitors without symbolic mark are POLYESTER CAPACITORS. (ECQM-type, ECQG-type, $\pm 10\%$ Tolerance)
- Polarized capacitors without symbolic mark are Aluminum Electrolytic Capacitors. (ECEA-type, $\pm 20\%$ Tolerance)

(TABLE-2)

SYMBOL	SPECIFICATION	TYPE
Ⓐ	Non-Polarized Electrolytic Capacitors	ECEA_KN_type
Ⓐ	Non-Polarized Electrolytic (for Network system)	ECEA_Y_type
Ⓐ	Tantalum Solid Electrolytic Capacitors	ECS_type
Ⓐ	Metalized Plastic Film Capacitors (TF Series)	ECQV_type
⓪	Temperature Compensating Ceramic Capacitors	ECC_type
	High-Dielectric Constant Ceramic Capacitors	ECK_type ECR_type
	Axial Lead Ceramic Capacitors	ECB_type
	Metalized Polyester Film Capacitors for Across the Line	ECQ_EW_type
	Aluminum Electrolytic Capacitors for Smoothing Circuit	ECES_type
	Multilayer Ceramic Chip Capacitors	ECUV_type

MIDI IMPLEMENTATION CHART

Digital Ensemble [SX-PR700/PR700M]

(Transmitted)

Function		RIGHT1,2,LEFT, PART4~15	PART16	ACMP1	ACMP2,3	BASS	DRUMS	CHORD	CONTROL	Remarks
Basic Channel	Default	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	memorized
	Changed	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	
Mode	Default	3	3	3	3	3	3	3	3	OMNI OFF,POLY MODE
	Messages	×	×	×	×	×	×	×	×	
	Altered	—	—	—	—	—	—	—	—	
Note Number	True voice	0-119	0-119	0-119	0-119	0-119	0-119	0-119	—	Changes depending on the position of the transpose control,octave shift,and drums type.
		—	—	—	—	—	—	—	—	
Velocity	Note ON	○	○	○	○	○	○	○	—	
	Note OFF	×	×	×	×	×	×	×	—	
After Touch	Key's	×	×	×	×	×	×	×	—	Transmitted during SEQUENCER playback.
	Ch's	○×*	×	×	×	×	×	×	—	
Pitch Bend		○×*	×	○×*	○×*	○×*	×	○×*	×	Transmitted during SEQUENCER playback and during rhythm performance.
Control Change	0,32	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	bank select MSB, LSB modulation data entry MSB, LSB volume panpot expression sustain sostenute soft auto play chord intro, fill in, ending reverb DSP effect digital effect RPN LSB, MSB all sound off reset all cotrollers
	1	○×*	×	○×*	○×*	○×*	×	○×*	×	
	6,38	○×*	×	×	×	×	×	×	×	
	7	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	
	10	○×*	×	○×*	○×*	○×*	×	×	×	
	11	○×*	○×*	○×*	○×*	○×*	○×*	×	×	
	64	○×*	×	○×*	○×*	○×*	×	×	×	
	66	○	×	×	×	×	×	×	×	
	67	○	×	×	×	×	×	×	×	
	80	×	×	○×*	×	×	×	×	×	
	82	×	×	×	×	×	○×*	×	×	
	91	○×*	○×*	○×*	○×*	○×*	○×*	○×*	○×*	
	93	○×*	○×*	×	×	×	×	×	×	
	94	○×*	×	○×*	○×*	○×*	×	○×*	×	
	100,101	○×*	×	×	×	×	×	×	×	
120	○	○	×	×	×	×	×	×		
121	○×*	○×*	×	×	×	×	×	×		
Prog Change	True #	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	Changes depending on program change mode and prog.cng to p.mem.
		—	—	—	—	—	—	—	—	
System exclusive		○								
System common	Song Pos	○×*								
	Song Sel	○×* (0-19)								
	Tune	×								
System Real Time	Clock	○								start/stop,continue
Commands		○×*								
Aux Messages	Local ON/ OFF	×	×	×	×	×	×	×	—	
	All notes OFF	×	×	×	×	×	×	×	—	
	Active Sense	○								
	Reset	×								
Notes		○×*.....Whether or not the data for each of these items is transmitted can be set.								

Mode 1: OMNI ON, POLY

Mode 2: OMNI ON, MONO

○:Yes

Mode 3: OMNI OFF, POLY

Mode 4: OMNI OFF, MONO

×:No

MEMO

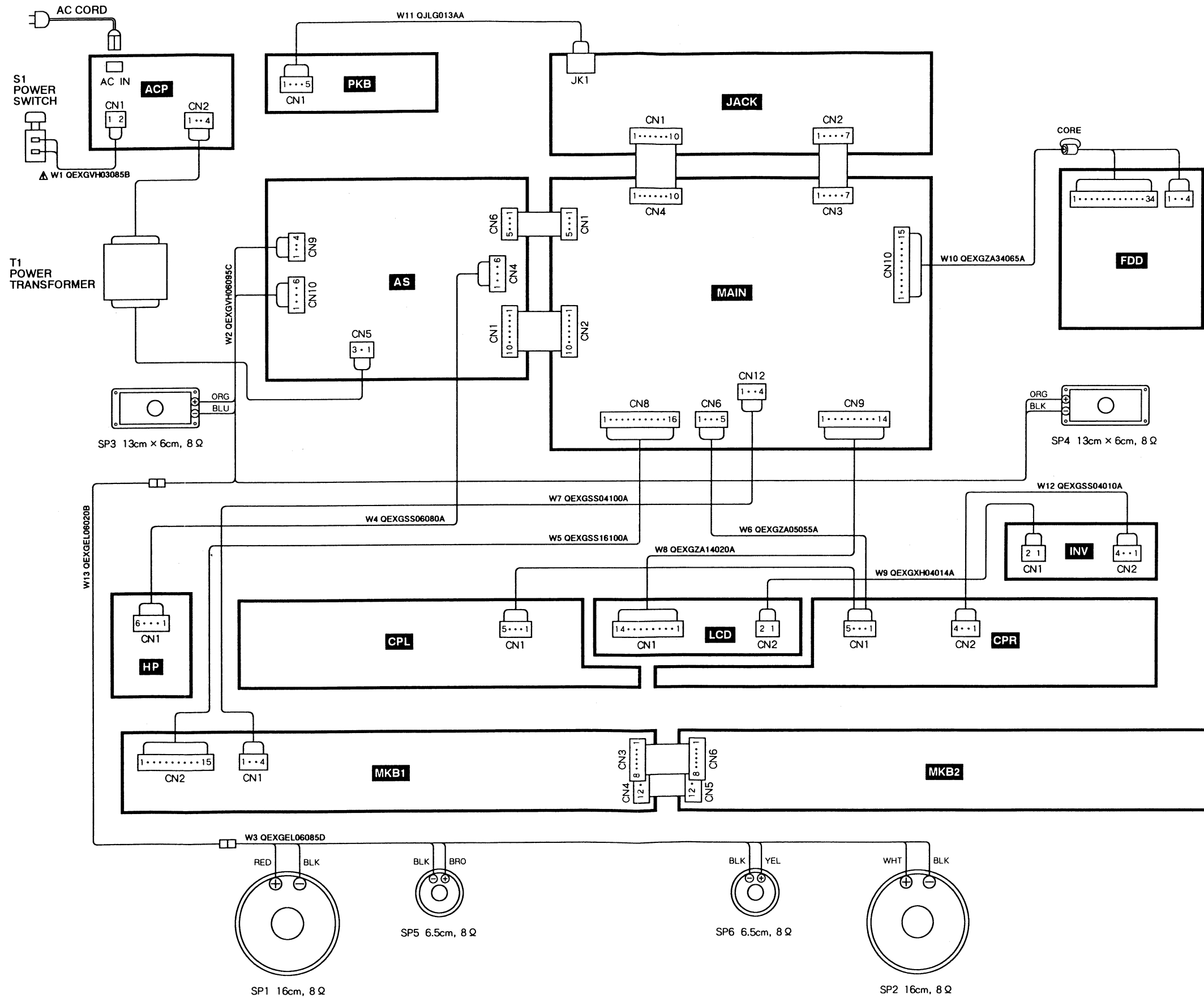
Digital Ensemble [SX-PR700/PR700M] (Recognized)

Function		RIGHT1,2,LEFT, PART4~15	PART16	ACMP1	ACMP2,3	BASS	DRUMS	CHORD	CONTROL	Remarks	
Basic Channel	Default	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	memorized	
	Changed	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16		
Mode	Default	3	3	3	3	3	3	3	3	OMNI OFF,POLY MODE	
	Messages	×	×	×	×	×	×	×	×		
	Altered	—	—	—	—	—	—	—	—		
Note Number		0-127	0-127	0-127	0-127	0-127	0-127	0-127	—	Changes depending on the position of the transpose control,octave shift, and drums type.	
	True voice	0-127	0-127	0-127	0-127	0-127	0-127	0-127	—		
Velocity	Note ON	○	○	○	○	○	○	○	—		
	Note OFF	×	×	×	×	×	×	×	—		
After Touch	Key's	×	×	×	×	×	×	×	—		
	Ch's	○×*	×	×	×	×	×	×	—		
Pitch Bend		○×*	×	○×*	○×*	○×*	×	○×*	×		
Control Change	0,32	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	bank select MSB, LSB modulation data entry MSB, LSB volume panpot expression sustain sostenute soft auto play chord intro, fill in, ending reverb DSP effect digital effect RPN LSB, MSB all sound off reset all cotrollers	
	1	○×*	×	○×*	○×*	○×*	×	○×*	×		
	6,38	○×*	×	×	×	×	×	×	×		
	7	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×		
	10	○×*	×	○×*	○×*	○×*	×	×	×		
	11	○×*	○×*	○×*	○×*	○×*	○×*	×	×		
	64	○×*	×	○×*	○×*	○×*	×	×	×		
	66	○	×	×	×	×	×	×	×		
	67	○	×	×	×	×	×	×	×		
	80	×	×	○×*	×	×	×	×	×		
	82	×	×	×	×	×	○×*	×	×		
	91	○×*	○×*	○×*	○×*	○×*	○×*	○×*	○×*		
	93	○×*	○×*	×	×	×	×	×	×		
	94	○×*	×	○×*	○×*	○×*	×	○×*	×		
	100,101	○×*	×	×	×	×	×	×	×		
120	○	○	○	○	○	○	○	×			
121	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×			
Prog Change		○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	Changes depending on program change mode and prog.cng to p.mem.	
	True #	0-127	0-127	0-127	0-127	0-127	0-127	0-127	—		
System exclusive		○									
System common	Song Pos	○×*									
	Song Sel	○×* (0-19)									
	Tune	×									
System Real Time	Clock	○								start/stop,continue	
	Commands	○×*									
Aux Messages	Local ON/ OFF	×	×	×	×	×	×	×	—		
	All notes OFF	○	○	○	○	○	○	○	—		
	Active Sense	○									
	Reset	×									
Notes		○×*.....Whether or not the data for each of these items is received can be set.									

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○:Yes
Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO ×:No

WIRING CONNECTION Diagram

WIRING CONNECTION Diagram

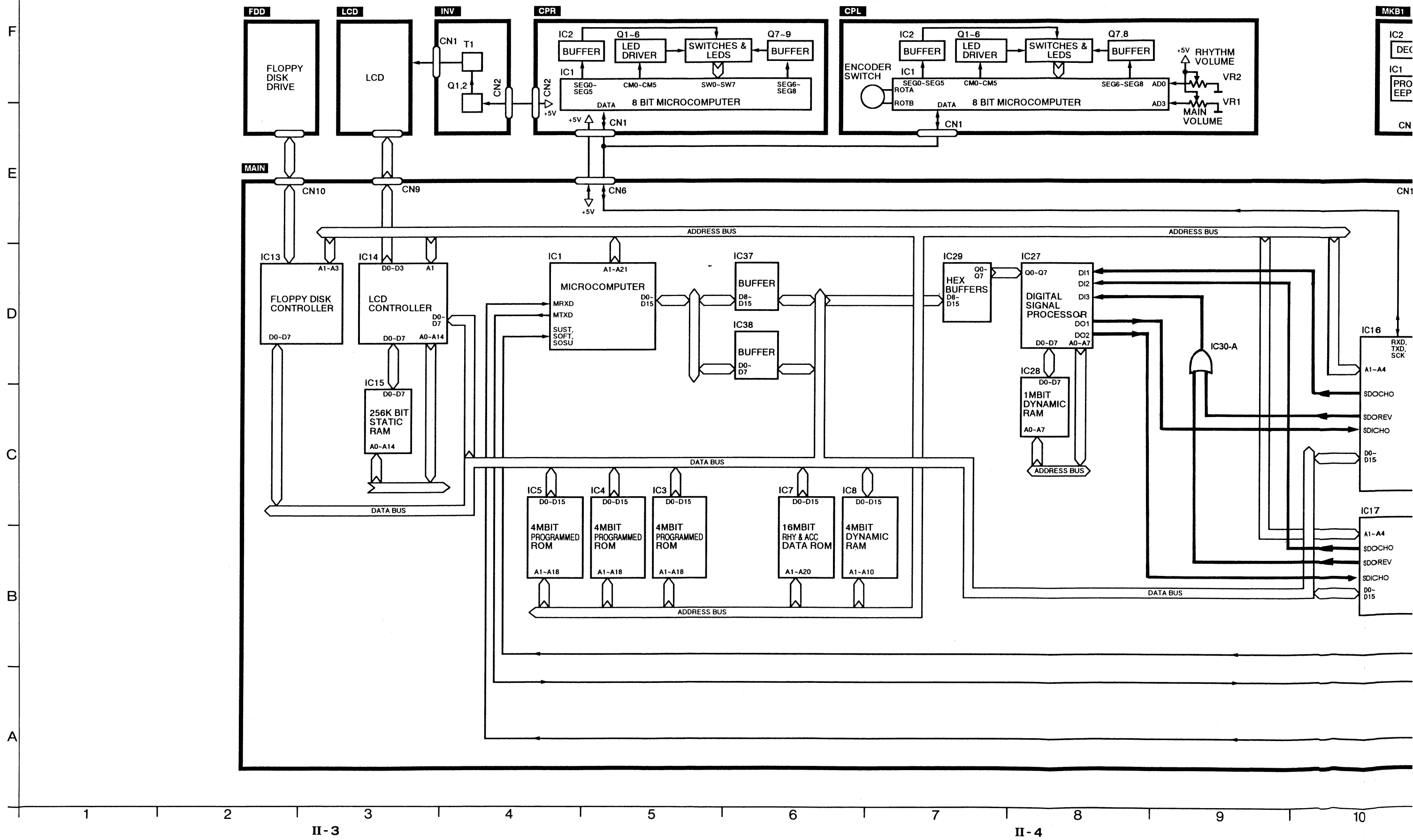


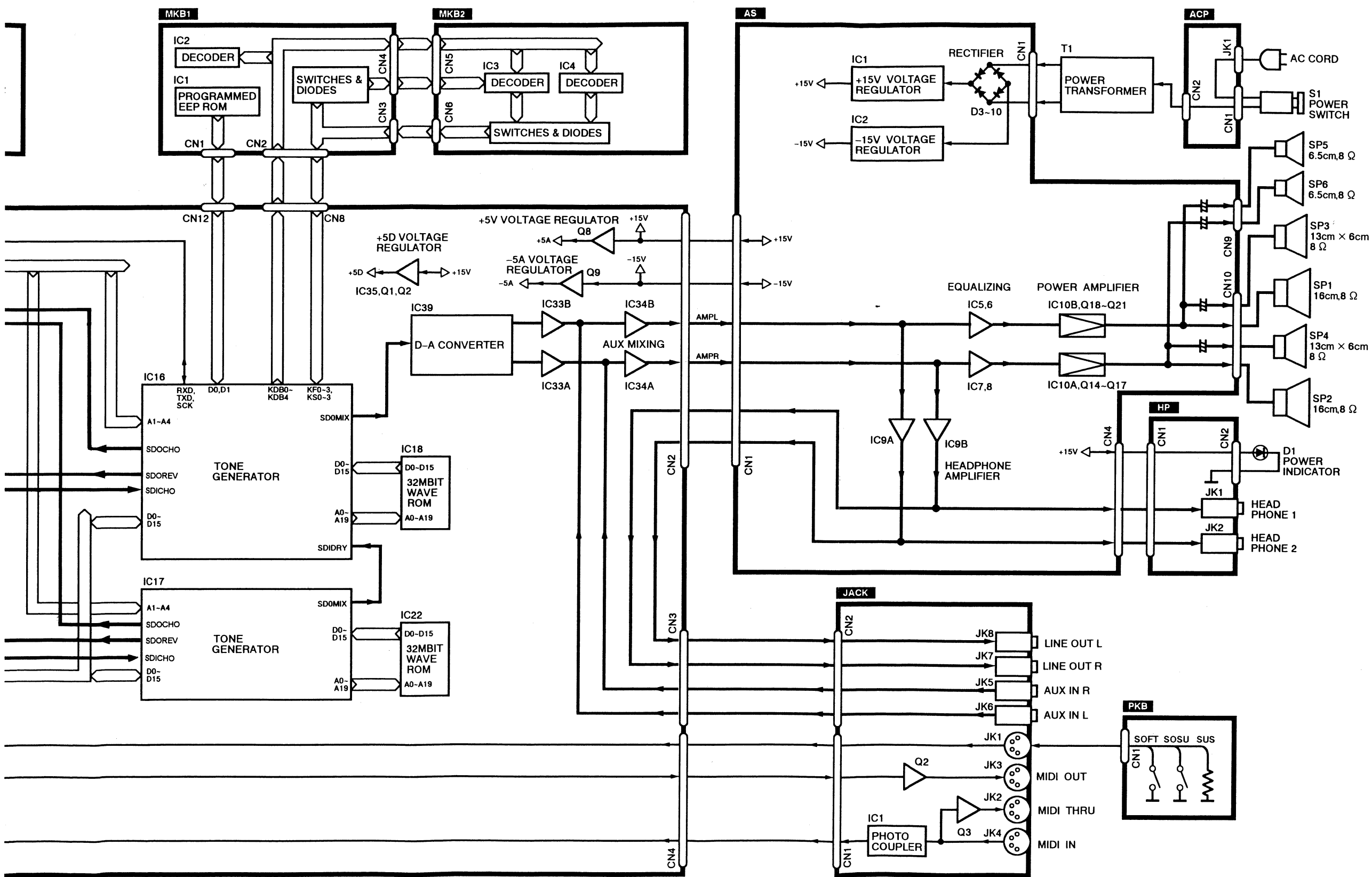
II-1

II-2

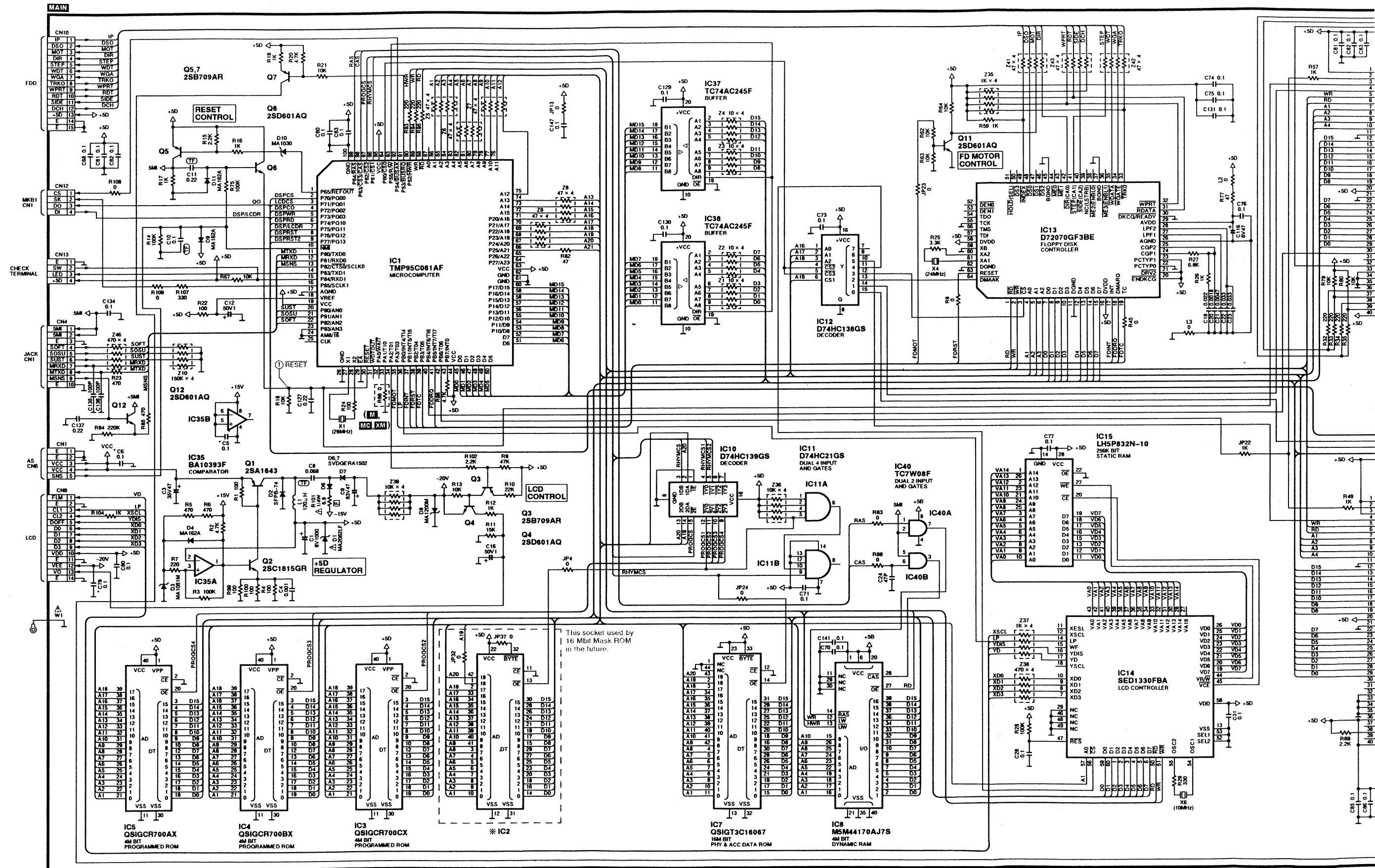
BLOCK Diagram

→ Tone Signal → Control Signal



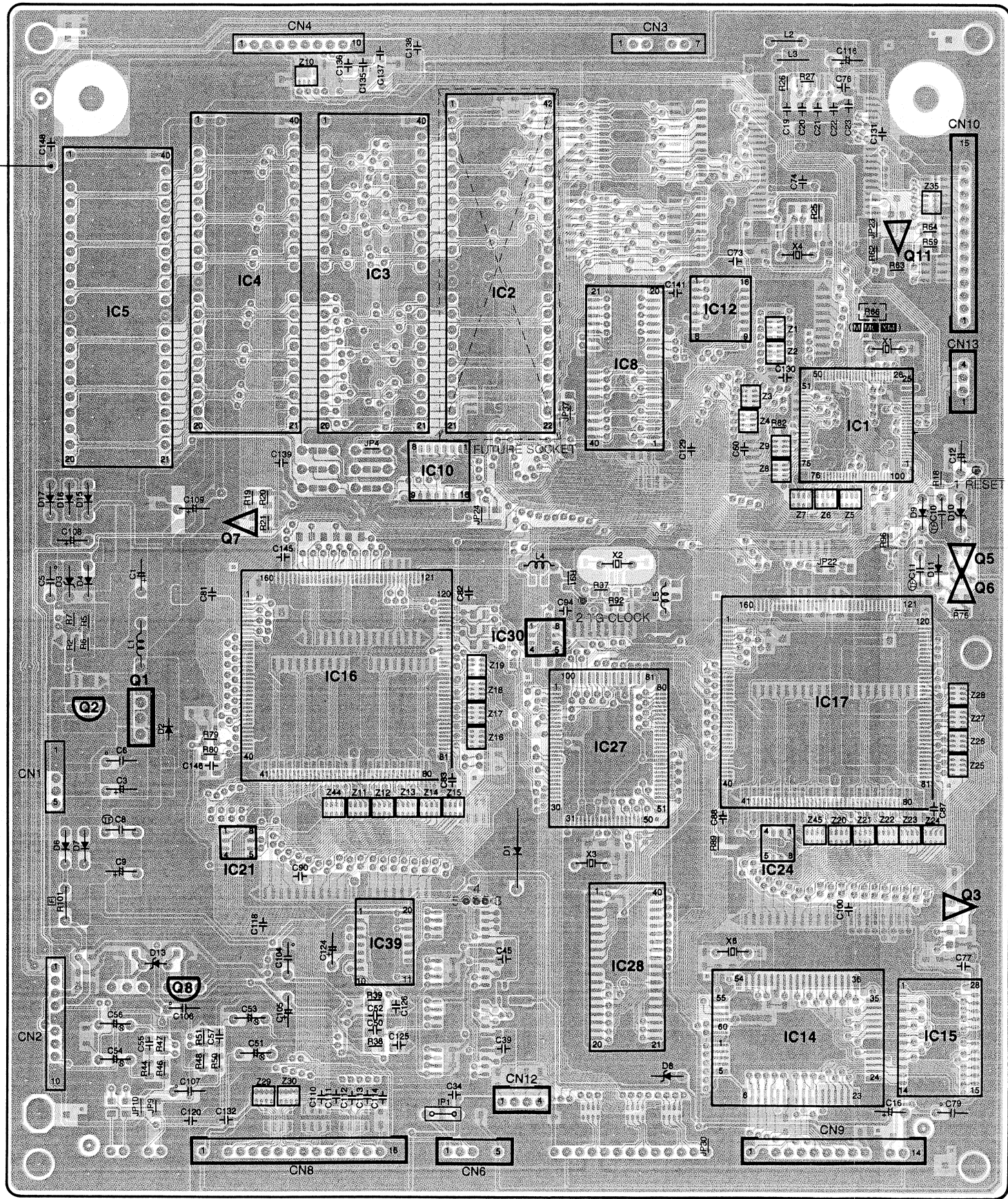


MAIN P.C. Diagram

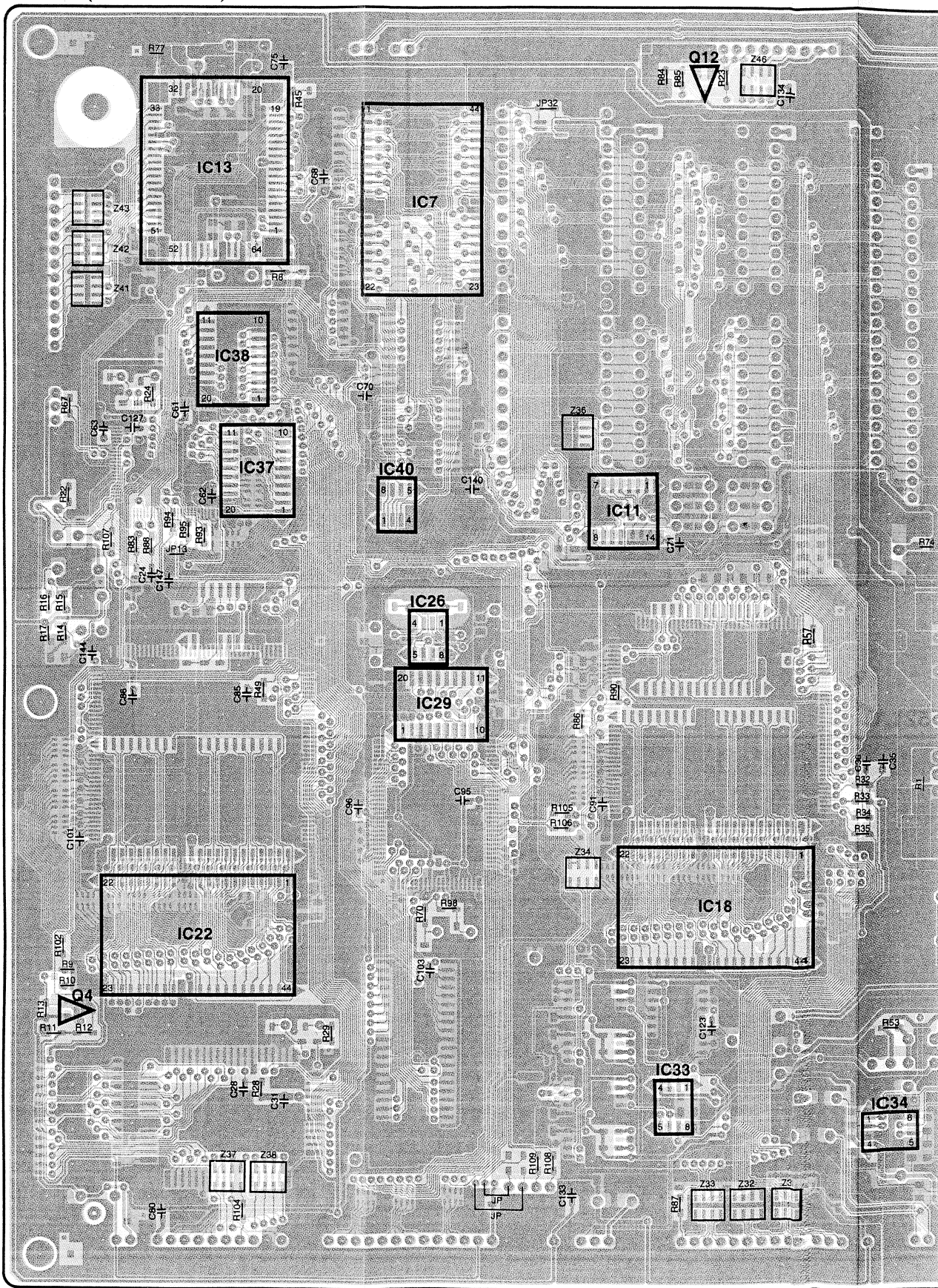


MAIN P.C. Board

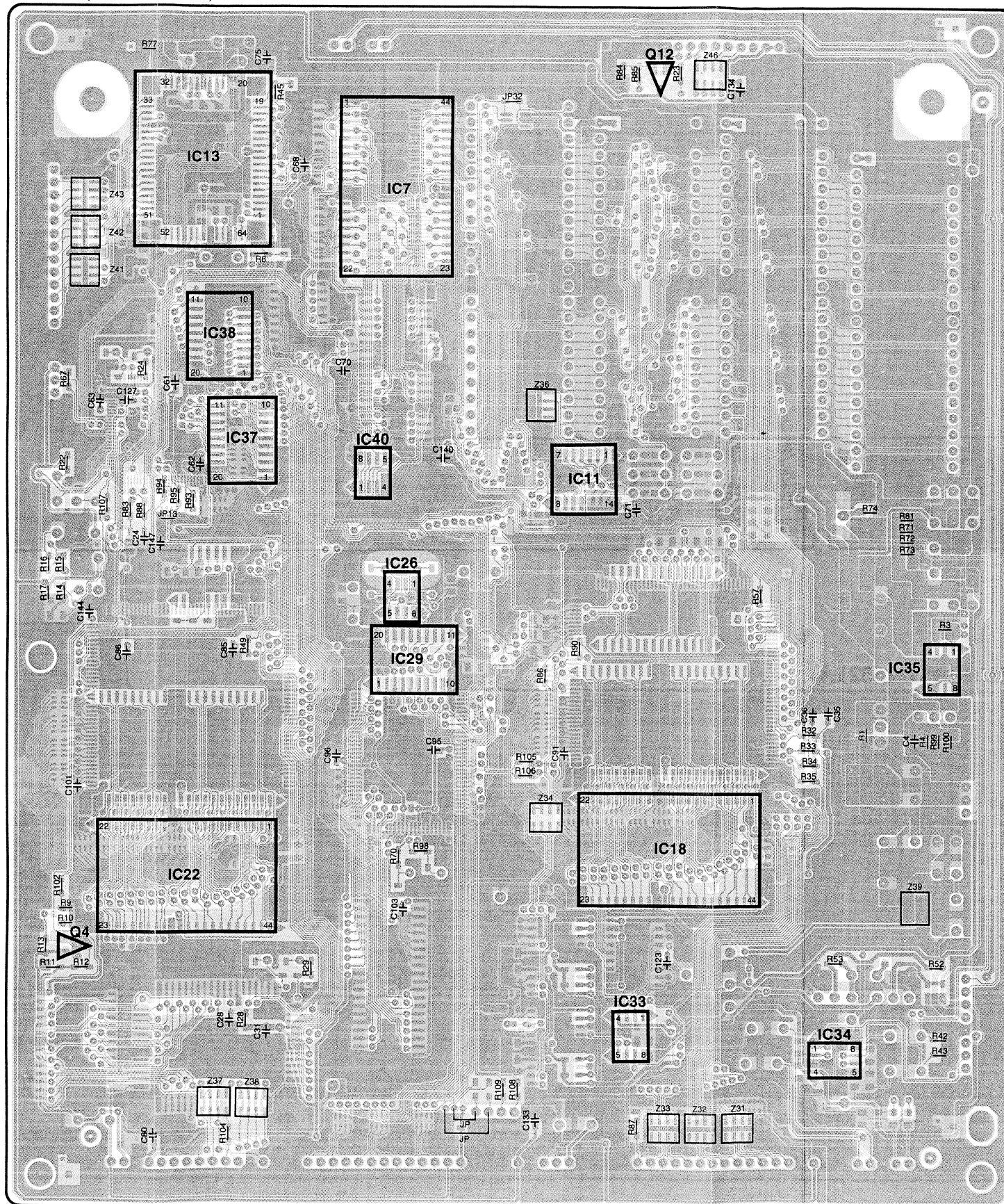
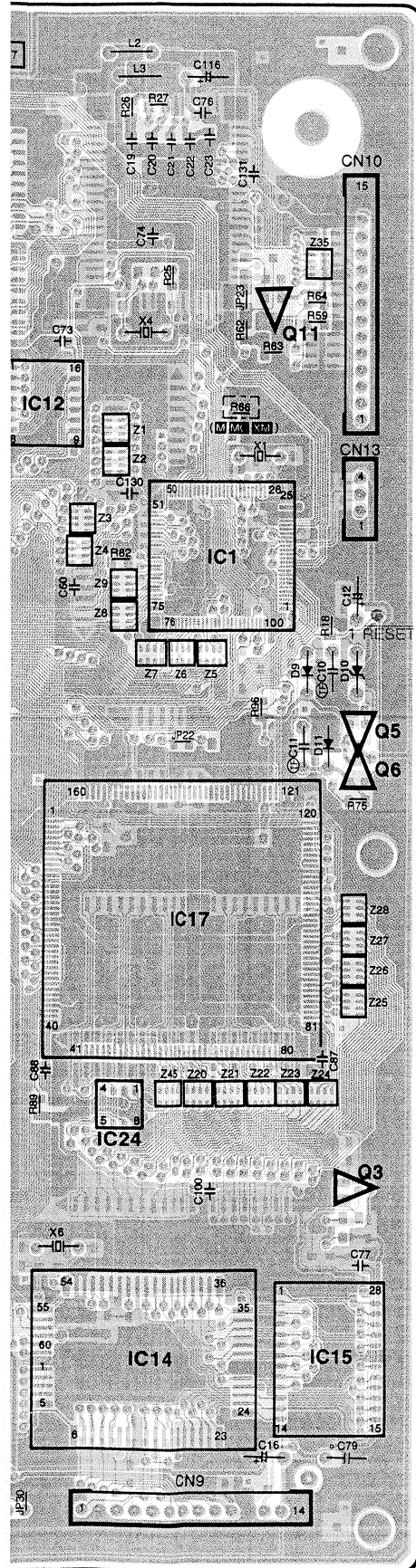
M MC XM (SXPG226461)
MAIN Others(SXPG226421)(COMPONENT SIDE)



MAIN (FOIL SIDE)



MAIN (FOIL SIDE)

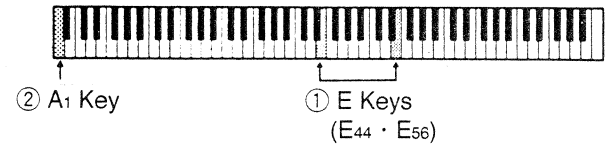


■ Measuring Condition

Check Point ③~⑤

Set to the self-diagnostic mode followings.

- While pressing two E keys (①) simultaneously, turn on the power switch.
- SOUND SPECIAL PERC
- Main Volume MAX
- Keyboard A1 (②)

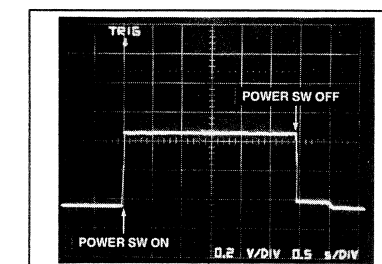


Check Point ①

Set the initial setting mode (Refer to page I-6)

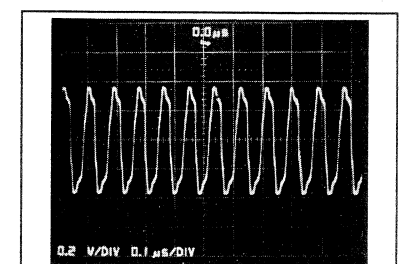
- SOUND SPECIAL PERC
- Main Volume MAX

① RESET

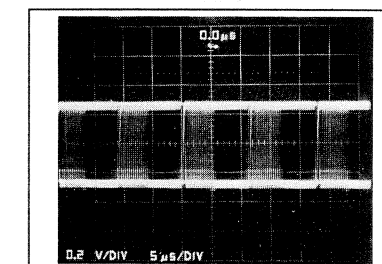


• Power SW ON → OFF

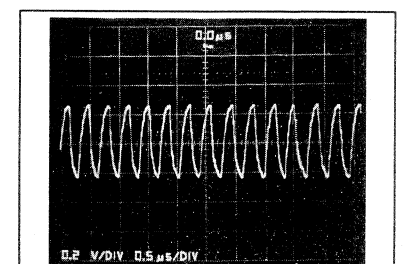
② TG CLOCK



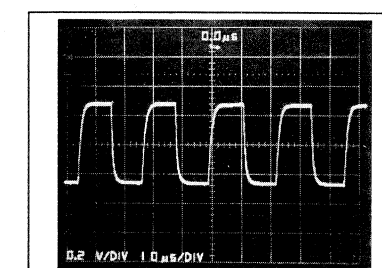
③



④

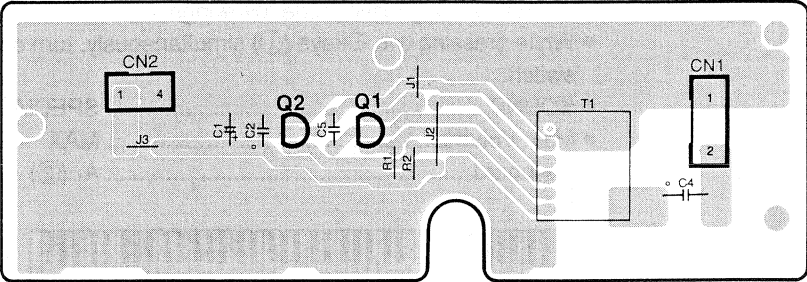


⑤

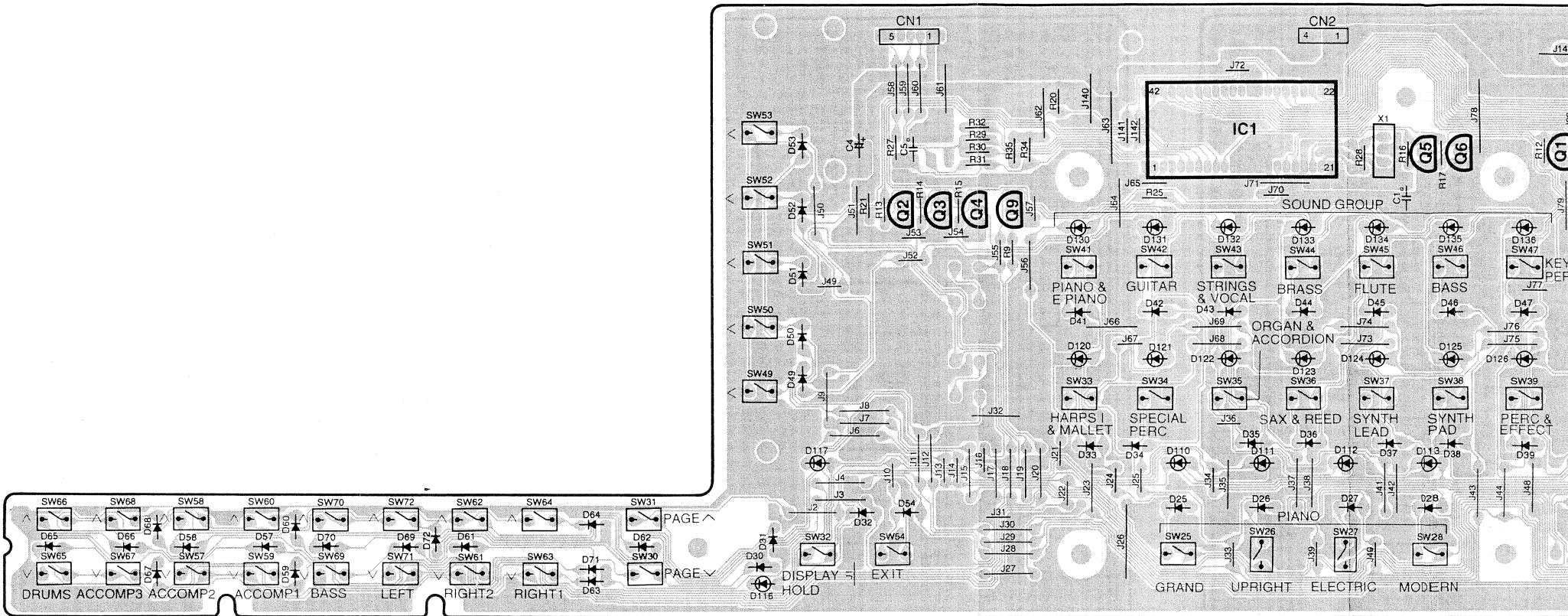


CPL/CPR/INV P.C. Board

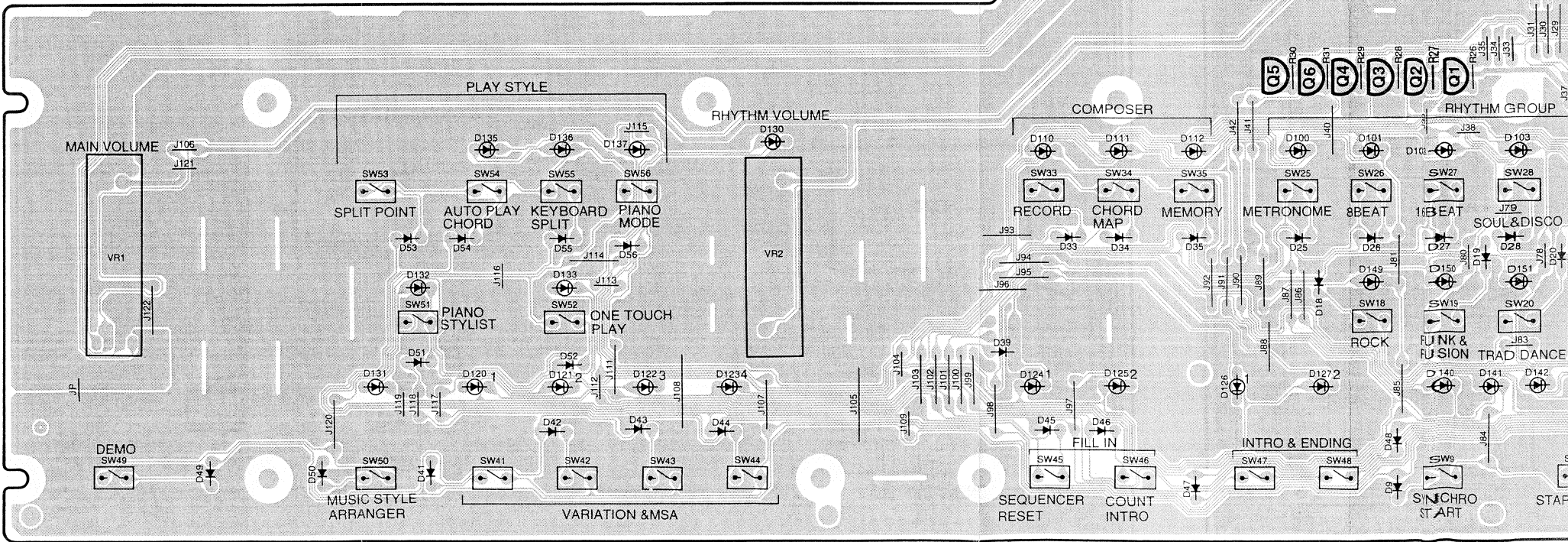
INV (SXPG226511C)



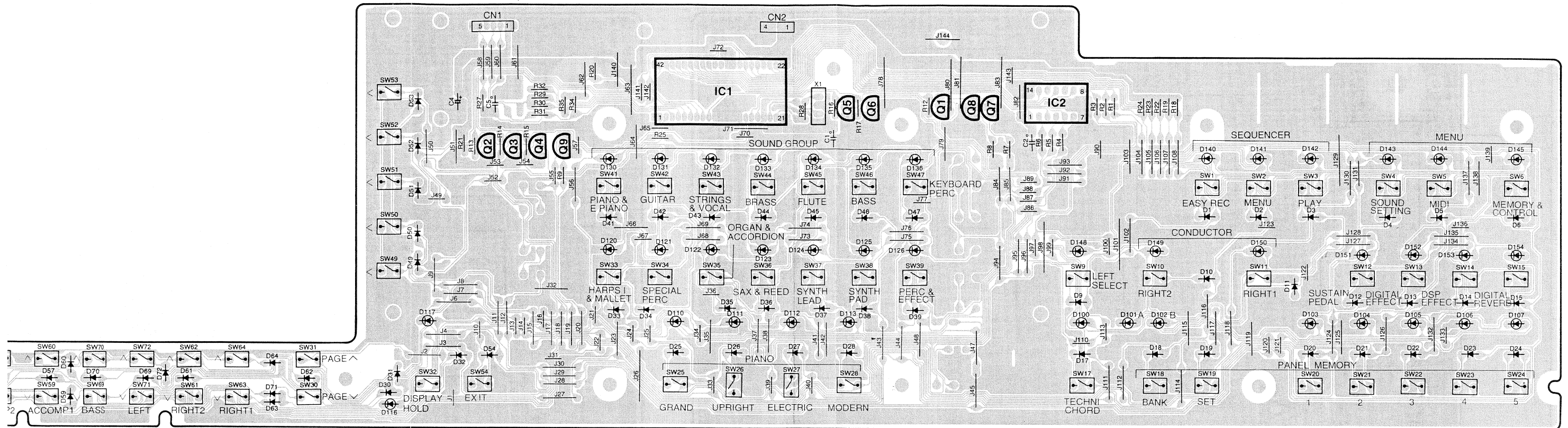
CPR (SXPG226521B)



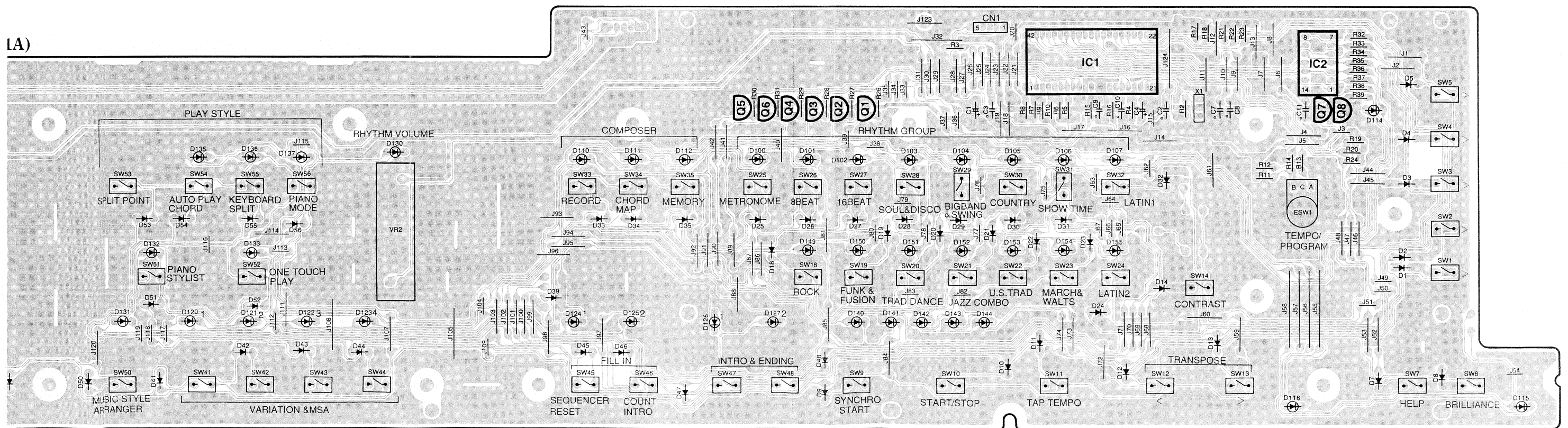
CPL (SXPG226521A)



CPR (SXPG226521B)



1A)



5

6

7

8

9

10

11

12

13

14

A



A



JACK/PKB

F

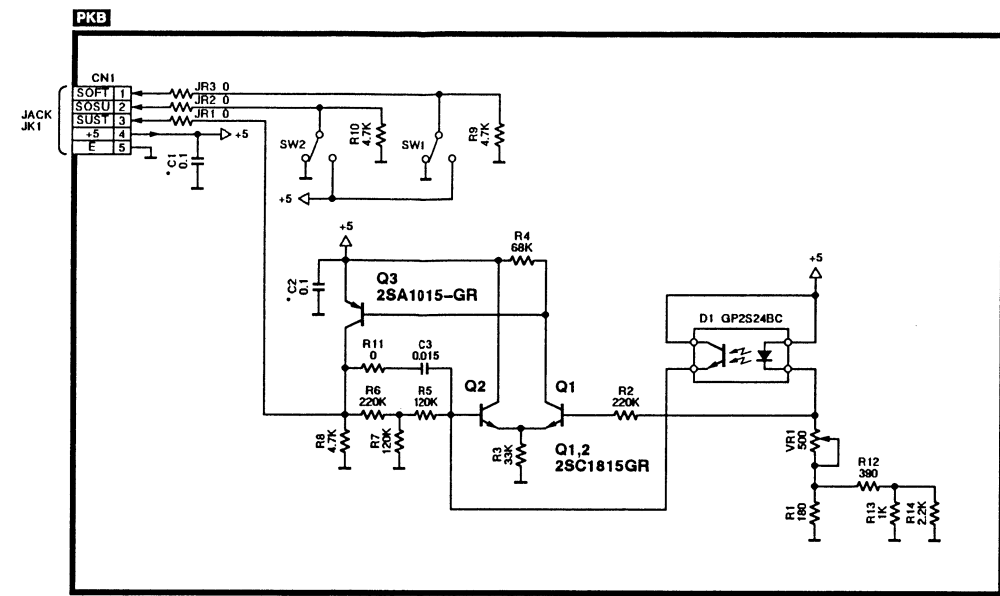
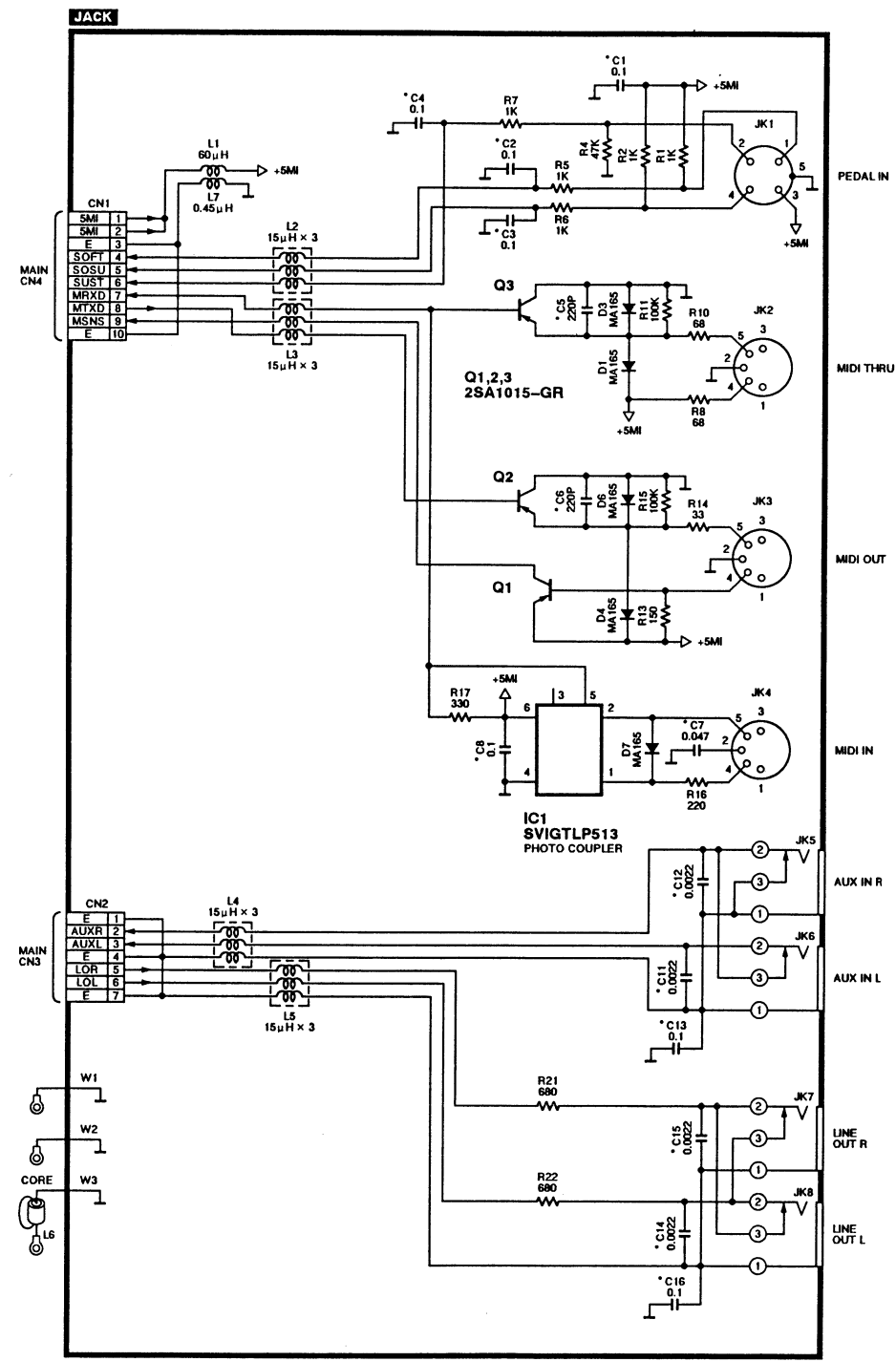
E

D

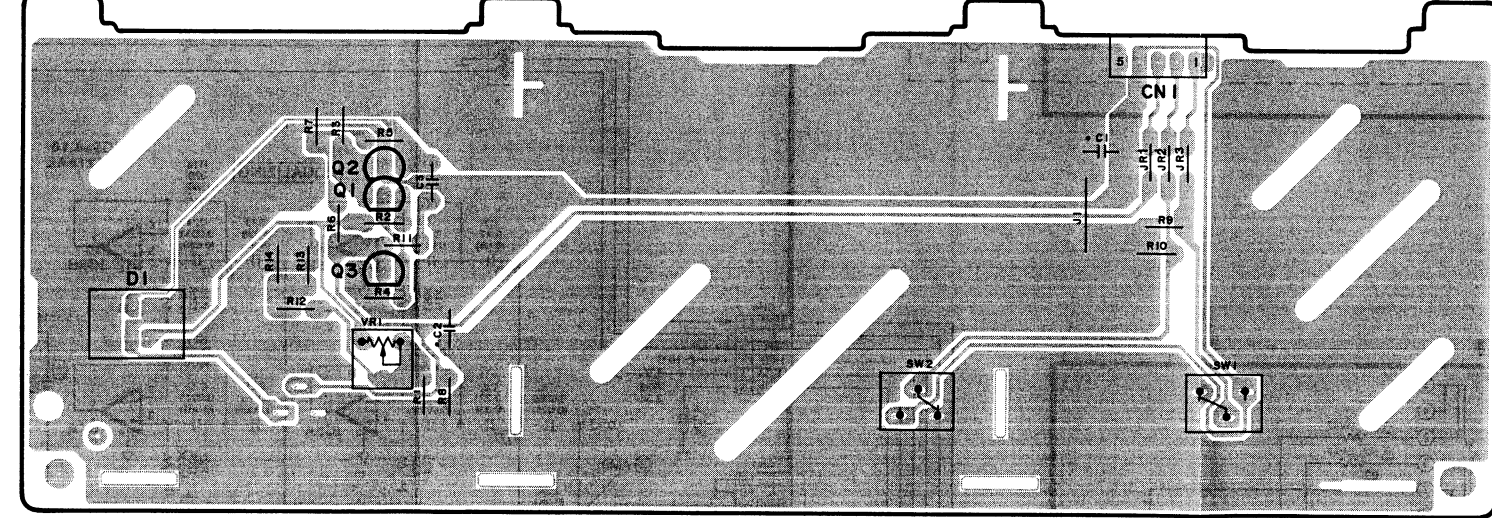
C

B

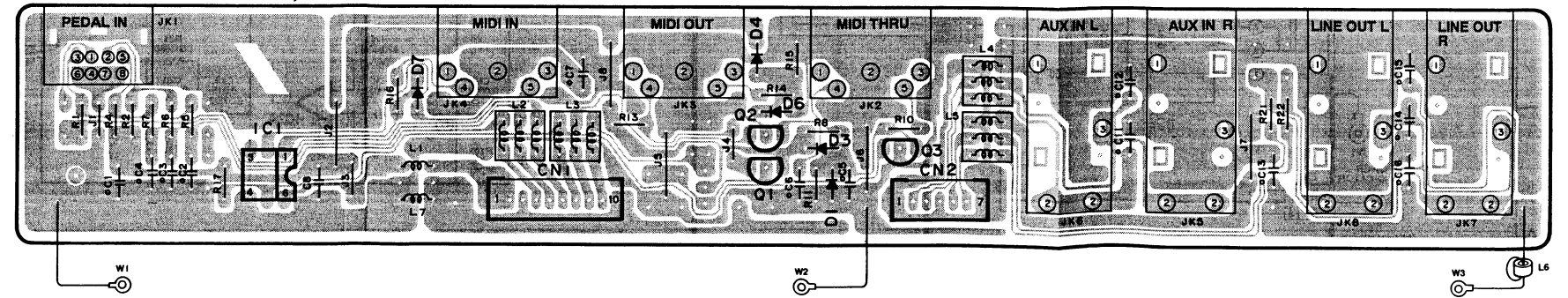
A



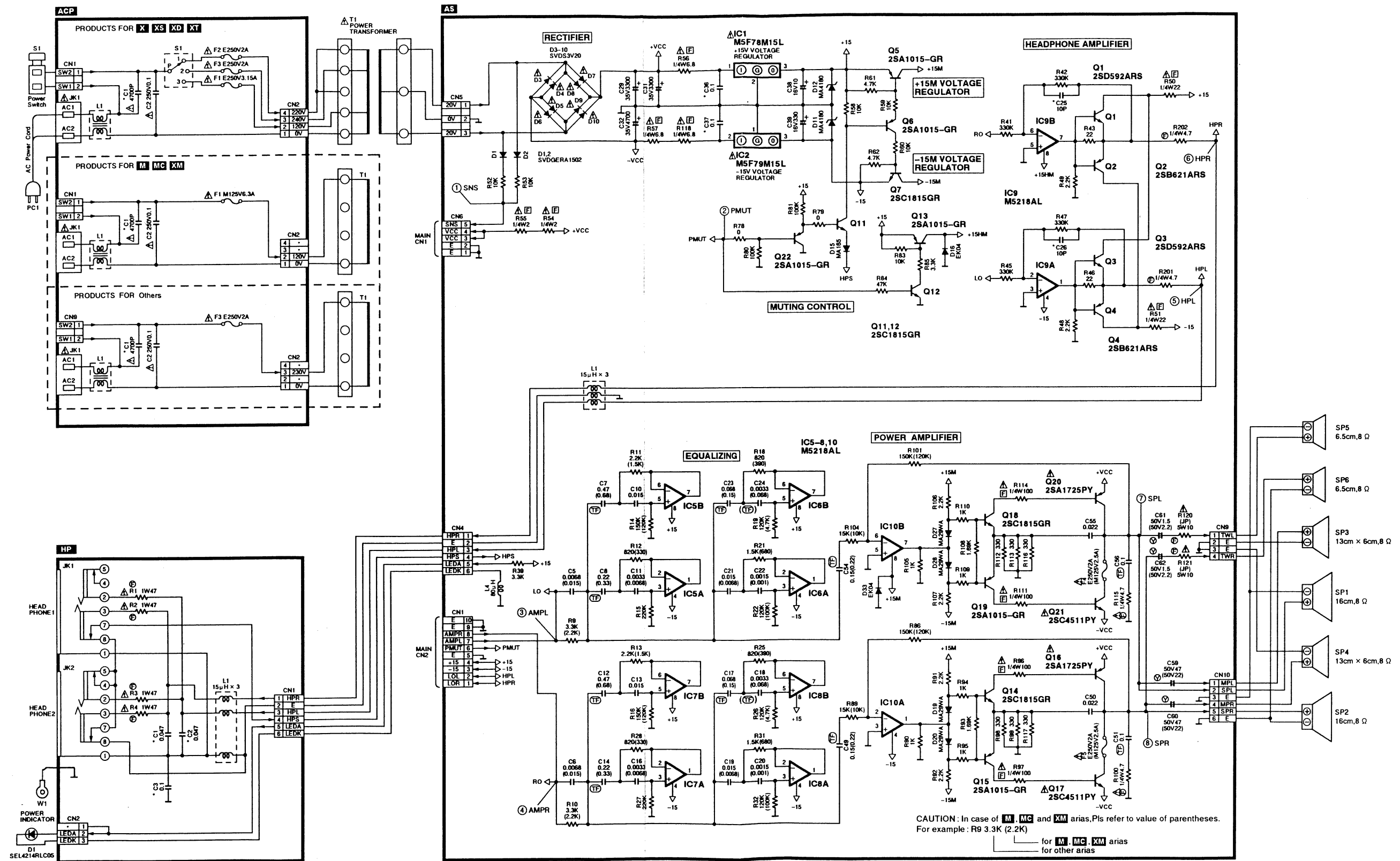
PKB (SXPG218211)



JACK (SXPG219641)



AS/ACP/HP P.C. Diagram



A — B — C — D — E — F

Check Point ③ ~ ⑧

Set to the self-diagnostic mode f

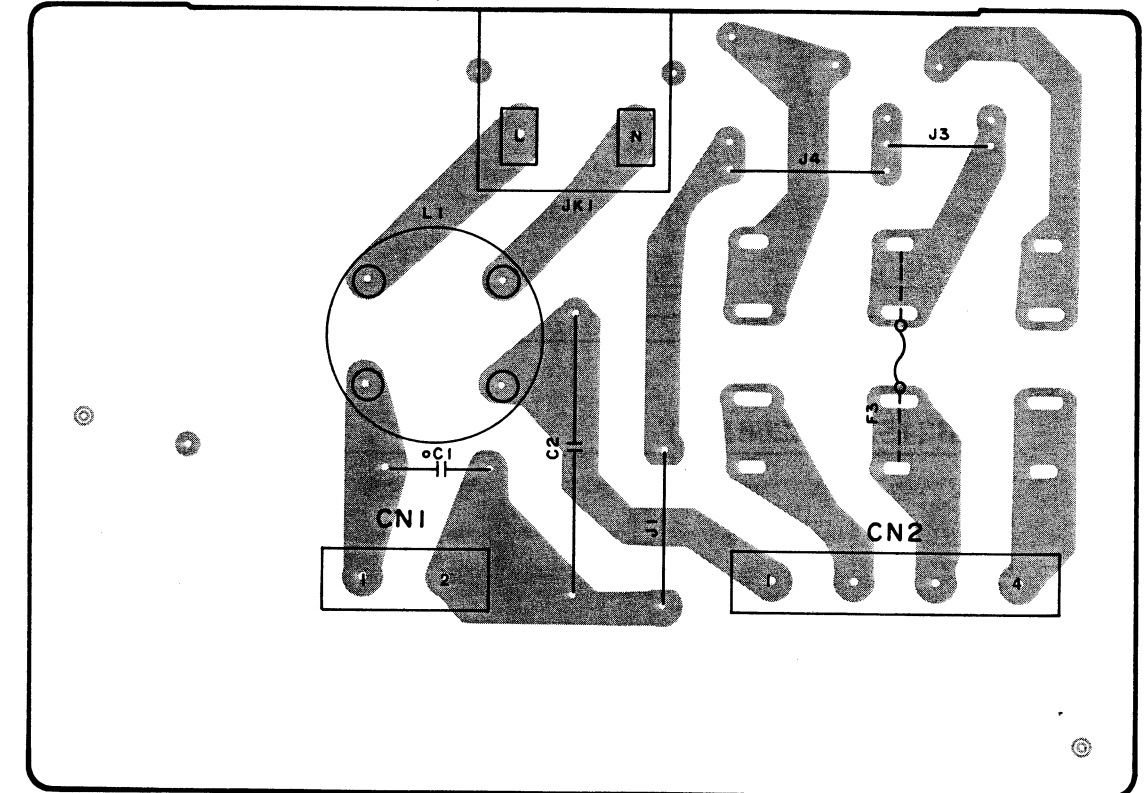
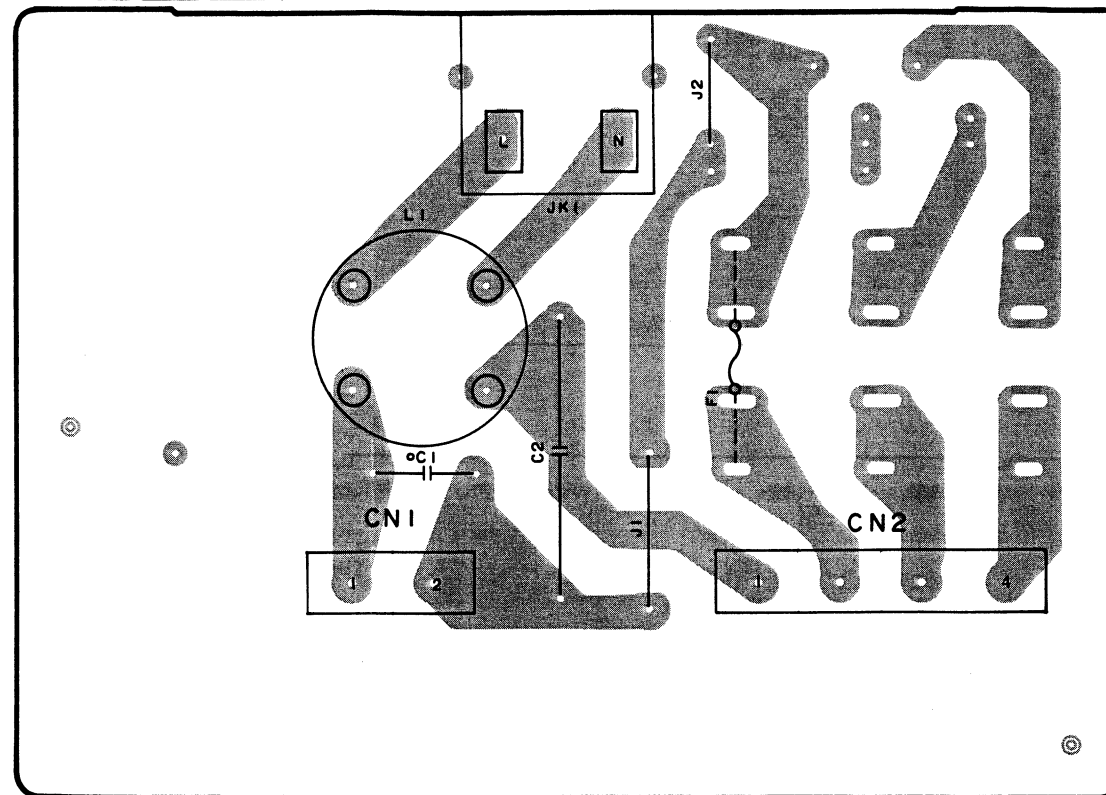
- While pressing two E keys (①) switch.
- SOUND
- Main Volume
- Keyboard



II-25

II-26

ACP Others(SXPG216061)

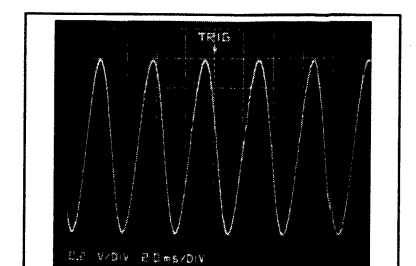
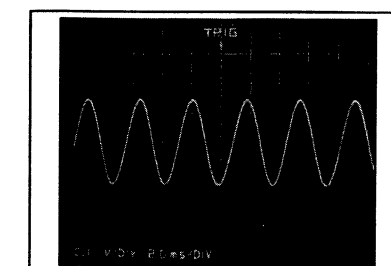
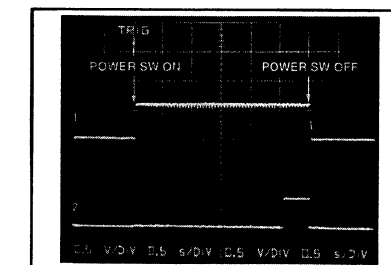


Check Point ③~⑧

- While pressing two E keys (①) simultaneously, turn on the power switch.

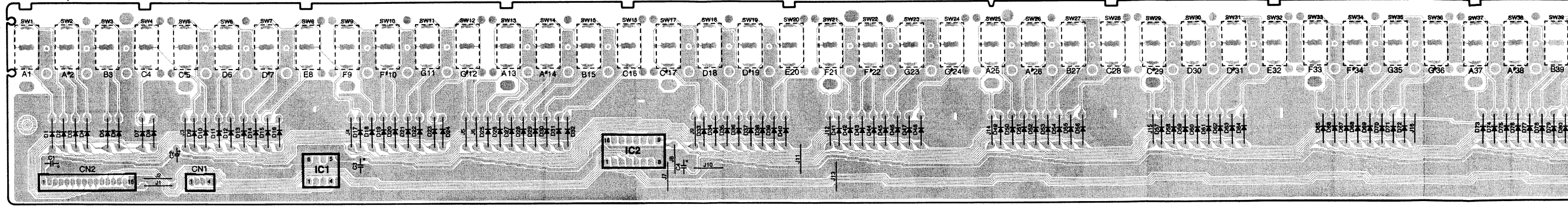
-

Check Point ①, ②
Set the initial setting mode (Refer to page I-6)

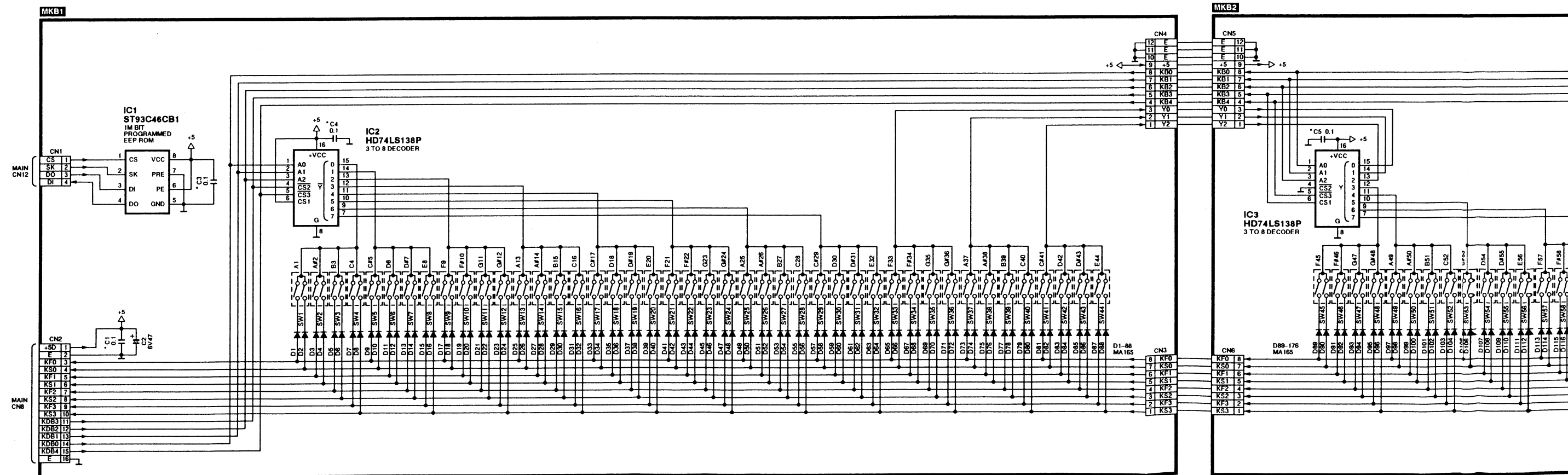
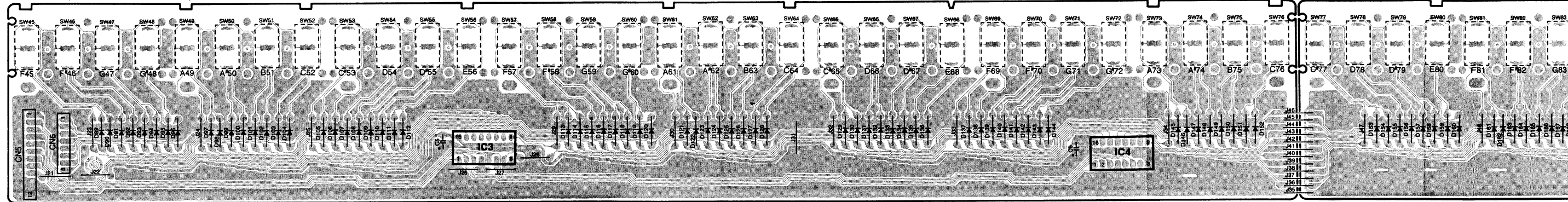


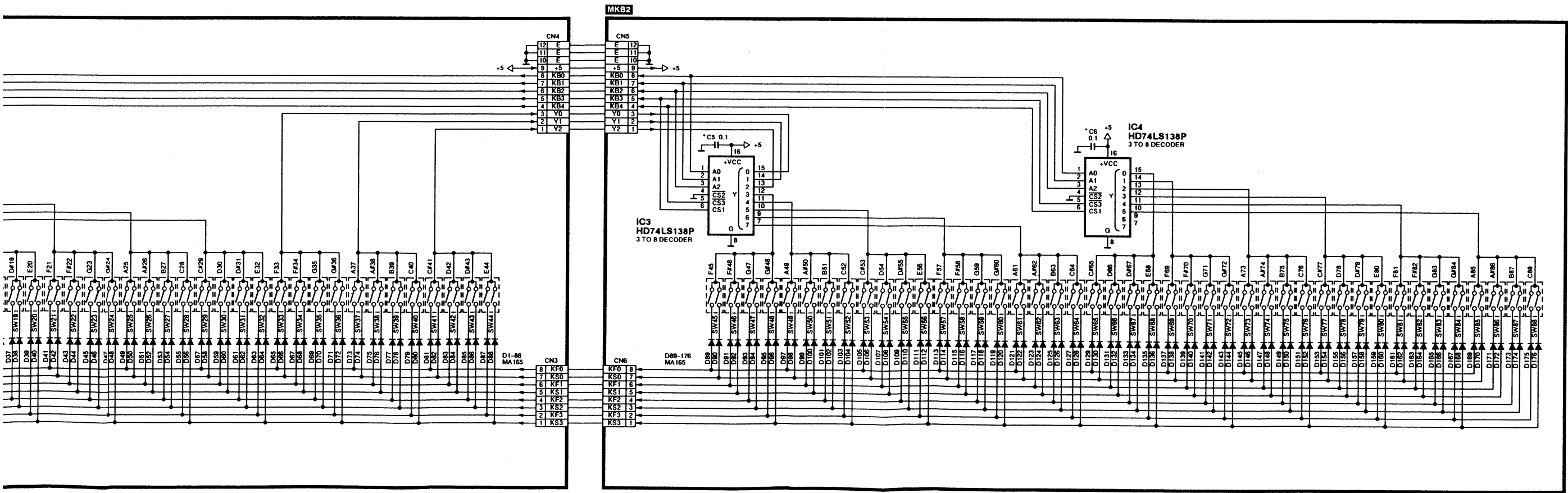
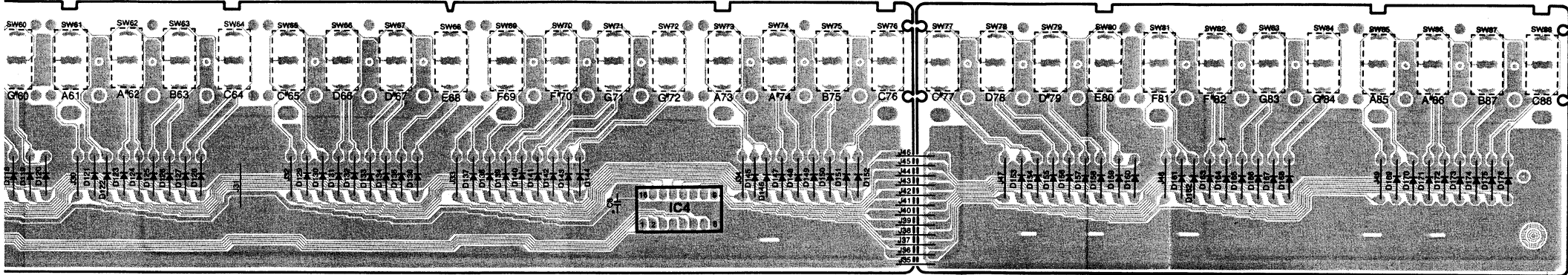
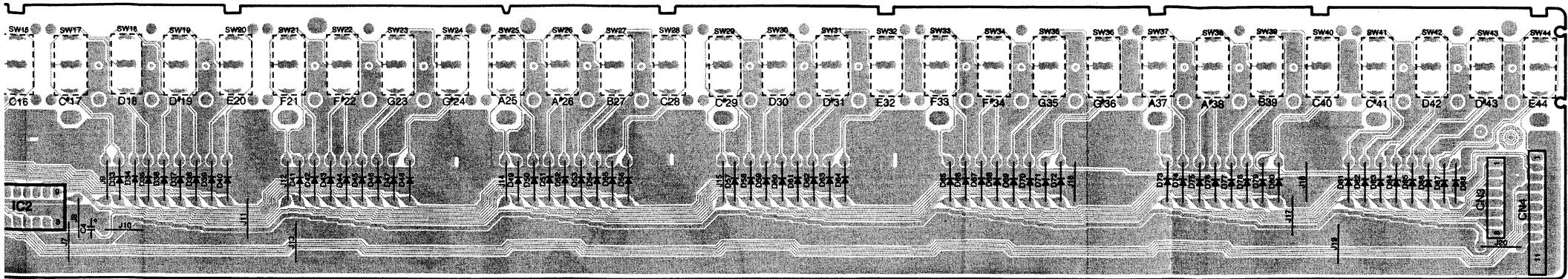
MKB1/MKB2

MKB1 (SXPG22611A)



MKB2 (SXPG22611B)





REPLACEMENT PARTS LIST

Notes:

1. The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention.
After the end of this period, the assembly will no longer be available.

2. Important safety notice
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. The "S" mark is service standard parts and may differ from production parts.
4. $\odot$ mark are new parts.
5. For part No. with area mark, check the area when placing an order.

PRINTED CIRCUIT BOARD

	RTL	Area	Part No.	Description	P/S
$\odot$	RTL	EN EK EZ EW EF EA EP EH X XL XR XS XD XT	SXPG226421	MAIN	1
$\odot$	RTL	M MC XM	SXPG226461	MAIN	1
$\odot$	RTL		SXPG226521A	CPL	1
$\odot$	RTL		SXPG226521B	CPR	1
$\odot$	RTL		SXPG226511C	INV	1
$\odot$	RTL		SXPG219641	JACK	1
$\odot$	RTL		SXPG218211	PKB	1
$\odot$	RTL	EN EK EZ EW EF EA EP EH X XL XR XS XD XT	SXPG2170191	AS	1
$\odot$	RTL	M MC XM	SXPG2170201	AS	1
$\odot$	RTL	EN EK EZ EW EF EA EP EH XL XR	SXPG216061	ACP	1
$\odot$	RTL	M MC XM	SXPG216081	ACP	1
$\odot$	RTL	X XS XD XT	SXPG216091	ACP	1
$\odot$	RTL		SXPG226521E	HP	1
$\odot$	RTL		SXPG226611A	MKB1	1
$\odot$	RTL		SXPG226611B	MKB2	1
$\odot$	RTL		QSLG019AA	LCD	1

MAIN MAIN CIRCUIT

	Ref. No.	Part No.	Description	P/S
INTEGRATED CIRCUITS				
$\odot$	IC1	TMP95C061AF	IC, 16BIT MICROCONTROLLER	1
$\odot$	IC3	QSIGCR700CX	IC, 4M EP ROM	1
$\odot$	IC3-1	HN27C4096G10	(BLANK ROM)	1
$\odot$	IC4	QSIGCR700BX	IC, 4M EP ROM	1
$\odot$	IC4-1	HN27C4096G10	(BLANK ROM)	1
$\odot$	IC5	QSIGCR700AX	IC, 4M EP ROM	1
$\odot$	IC5-1	HN27C4096G10	(BLANK ROM)	1
$\odot$	IC7	QSIGT3C16067	IC, 16M MASK ROM	1
$\odot$	IC8	M5M44170AJ7S	IC, 4M BIT D RAM	1
$\odot$	IC10	D74HC139GS	IC, CMOS LOGIC	1
$\odot$	IC11	D74HC21GS	IC, CMOS LOGIC	1
$\odot$	IC12	D74HC138GS	IC, CMOS LOGIC	1
$\odot$	IC13	D72070GF3BE	IC, 8BIT MICROCONTROLLER	1
$\odot$	IC14	SED1330FBA	LCD CONTROLLER	1
$\odot$	IC15	LH5P832N-10	256K BIT STATIC RAM	1
$\odot$	IC16, 17	D96140GD001	IC, 16BIT MICROCONTROLLER	2
$\odot$	IC18	QSIGU3C32392	IC, 32M MASK ROM	1
$\odot$	IC21	TC7W08F	DUAL 2-INPUT AND GATES	1

	Ref. No.	Part No.	Description	P/S
$\odot$	IC22	QSIGU3C32396	IC, 32M MASK ROM	1
$\odot$	IC24	TC7W08F	DUAL 2-INPUT AND GATES	1
$\odot$	IC26	TC7W04F	DUAL 2-INPUT OR GATES	1
$\odot$	IC27	D6383GF-3BA	IC, 16BIT MICROCONTROLLER	1
$\odot$	IC28	LC321664AJ80	1M BIT DYNAMIC RAM	1
$\odot$	IC29	D74HC374GS	IC, CMOS LOGIC	1
$\odot$	IC30	TC7W32F	DUAL 2-INPUT OR GATES	1
$\odot$	IC33, 34	M5218AFP	OPERATIONAL AMPLIFIER	2
$\odot$	IC35	BA10393F	COMPARATOR	1
$\odot$	IC37, 38	TC74AC245F	IC, CMOS LOGIC	2
$\odot$	IC39	PCM69AU	D-A CONVERTER	1
$\odot$	IC40	TC7W08F	DUAL 2-INPUT AND GATES	1

TRANSISTORS

	Ref. No.	Part No.	Description	P/S
$\odot$	Q1	2SA1643	TRANSISTOR	1
$\odot$	Q2	2SC1815GR	TRANSISTOR	1
$\odot$	Q3	2SB709AR	TRANSISTOR	1
$\odot$	Q4	2SD601AQ	TRANSISTOR	1
$\odot$	Q5	2SB709AR	TRANSISTOR	1
$\odot$	Q6	2SD601AQ	TRANSISTOR	1
$\odot$	Q7	2SB709AR	TRANSISTOR	1
$\odot$	Q8	2SC1815GR	TRANSISTOR	1
$\odot$	Q11, 12	2SD601AQ	TRANSISTOR	2

DIODES

	Ref. No.	Part No.	Description	P/S
$\odot$	D1	Δ MA2062LF	ZENER, 6.2V	1
$\odot$	D2	SFPB-74	DIODE, SI	1
$\odot$	D3	MA1051M	DIODE, SI	1
$\odot$	D4	MA162A	MA150IR (SUB. PART)	1
$\odot$	D6, 7	SVDGERA1502	RECTIFIER	2
$\odot$	D8	MA1200M	DIODE, SI	1
$\odot$	D9	MA162A	MA150IR (SUB. PART)	1
$\odot$	D10	MA1030	ZENER, 3.0V	1
$\odot$	D11	MA162A	MA150IR (SUB. PART)	1
$\odot$	D13	MA1062M	ZENER, 6.2V	1
$\odot$	D15~17	MA162A	MA150IR (SUB. PART)	3

OSCILLATORS

	Ref. No.	Part No.	Description	P/S
$\odot$	X1	QSGXG2F2800A	CERAMIC OSCILLATOR	1
$\odot$	X2	QSGXG1A1128A	CRYSTAL OSCILLATOR	1
$\odot$	X3	QSGXG2F2500A	25MHz CERAMIC OSCILLATOR	1
$\odot$	X4	QSGXG2F2400A	CERAMIC OSCILLATOR	1
$\odot$	X6	QSGXG2F1000A	CERAMIC OSCILLATOR	1

COMPONENT COMBINATIONS

	Ref. No.	Part No.	Description	P/S
$\odot$	Z1~4	EXBV8V100J	RESISTOR RESISTOR	4
$\odot$	Z5~9	EXBV8V470J	RESISTOR RESISTOR	5
$\odot$	Z10	EXBV8V154J	RESISTOR RESISTOR	1
$\odot$	Z11~15	EXBV8V101J	100 Ω ×4	5

Ref. No.	Part No.	Description	P/S	Ref. No.	Part No.	Description	P/S
Z16~19	EXBV8V221J	220Ω×4	4	R45	ERJ6GEY0R00V	0Ω	1
Z20~24	EXBV8V101J	100Ω×4	5	R46	ERJ6GEYJ682V	6.8KΩ	1
Z25~28	EXBV8V221J	220Ω×4	4	R47	ERJ6GEYJ223V	22KΩ	1
Z29, 30	EXBV8V103J	10KΩ×4	2	R48	ERJ6GEYJ682V	6.8KΩ	1
Z31~33	EXBS8V471J	470Ω×4	3	R49	ERJ6GEYJ102V	1KΩ	1
Z34	EXBS8V222J	2.2KΩ×4	1	R50	ERJ6GEYJ682V	6.8KΩ	1
Z35	EXBV8V102J	1KΩ×4	1	R51	ERJ6GEYJ223V	22KΩ	1
Z36	EXBS8V103J	10KΩ×4	1	R52	ERJ6GEYJ221V	220Ω	1
Z37	EXBS8V102J	1KΩ×4	1	R53, 57, 59	ERJ6GEYJ102V	1KΩ	3
Z38	EXBS8V471J	470Ω×4	1	R62~64	ERJ6GEYJ103V	10KΩ	3
Z39	EXBS8V103J	10KΩ×4	1	R66	ERJ6GEY0R00V	0Ω,	1
Z41~43	EXBS8V470J	47Ω×4	3			M MC XM	
Z44, 45	EXBV8V101J	100Ω×4	2	R67	ERJ6GEYJ103V	10KΩ	1
Z46	EXBS8V471J	470Ω×4	1	R70	ERJ6GEYJ471V	470Ω	1
COILS				R71~73	ERJ6GEYJ222V	2.2KΩ	3
L1	QLQGT1T121SA	120μH	1	R74	ERJ6GEYJ101V	100Ω	1
L4, 5	QLQGT1B800MA	80μH	2	R75	ERJ6GEYJ104V	100KΩ	1
IC PROTECTOR				R77	ERJ6GEYJ470V	47Ω	1
IP1	△ ICP-N10T104	IC PROTECTOR	1	R79, 80	ERJ6GEYJ103V	10KΩ	2
WIRE				R81	ERJ6GEYJ222V	2.2KΩ	1
W1	△ QEXGRA01005A	WIRE	1	R82	ERJ6GEYJ470V	47Ω	1
RESISTORS				R83	ERJ6GEY0R00V	0Ω	1
JP4	ERD25V0R00	CARBON FILM RESISTOR	1	R84	ERJ6GEYJ224V	220KΩ	1
JP9, 10, 13	ERJ6GEY0R00V	0Ω	3	R85	ERJ6GEYJ471V	470Ω	1
JP22	ERJ6GEYJ102V	1KΩ	1	R86	ERJ6GEYJ102V	1KΩ	1
JP23, 24, 30, 32, 37	ERJ6GEY0R00V	0Ω	5	R87	ERJ6GEYJ471V	470Ω	1
L2, 3	ERD25V0R00	CARBON FILM RESISTOR	2	R88	ERJ6GEY0R00V	0Ω	1
R1	ERJ6GEYJ101V	100Ω	1	R89	ERJ6GEYJ222V	2.2KΩ	1
R2	ERJ6GEYJ472V	4.7KΩ	1	R90	ERJ6GEYJ102V	1KΩ	1
R3	ERJ6GEYJ104V	100KΩ	1	R91~95	ERJ6GEYJ221V	220Ω	5
R4	ERJ6GEYJ101V	100Ω	1	R96	ERJ6GEYJ472V	4.7KΩ	1
R5, 6	ERJ6GEYJ471V	470Ω	2	R98	ERJ6GEYJ104V	100KΩ	1
R7	ERJ6GEYJ221V	220Ω	1	R99, 100	ERJ6GEYJ101V	100Ω	2
R8	ERJ6GEY0R00V	0Ω	1	R101	△ ERD2FCVJ6R8	6.8Ω, 1/4W, FUSE TYPE	1
R9	ERJ6GEYJ473V	47KΩ	1	R102	ERJ6GEYJ222V	2.2KΩ	1
R10	ERJ6GEYJ223V	22KΩ	1	R104	ERJ6GEYJ102V	1KΩ	1
R11	ERJ6GEYJ153V	15kΩ	1	R105, 106	ERJ6GEYJ222V	2.2KΩ	2
R12	ERJ6GEYJ102V	1KΩ	1	R107	ERJ6GEYJ331V	330Ω	1
R13	ERJ6GEYJ103V	10KΩ	1	R108, 109	ERJ6GEY0R00V	0Ω	2
R14	ERJ6GEYJ104V	100KΩ	1	CAPACITORS			
R15	ERJ6GEYJ222V	2.2KΩ	1	○ C1	ECA0JM102	ALUMINIUM CAPACITOR	1
R16, 17	ERJ6GEYJ102V	1KΩ	2	○ C3	ECA1VM470	ALUMINIUM CAPACITOR	1
R18	ERJ6GEYJ103V	10KΩ	1	C4	ECUV1H102JX	0.001μF	1
R19	ERJ6GEYJ102V	1KΩ	1	C5, 6	ECRF1H104ZF	0.1μF	2
R20	ERJ6GEYJ472V	4.7KΩ	1	C8	ECQV1H683JM	0.068μF	1
R21	ERJ6GEYJ103V	10KΩ	1	○ C9	ECA1JM470	ALUMINIUM CAPACITOR	1
R22	ERJ6GEYJ101V	100Ω	1	C10	ECQV1H104JM	0.1μF	1
R23	ERJ6GEYJ471V	470Ω	1	C11	ECQV1H224JM	0.22μF	1
R24	ERJ6GEYJ101V	100Ω	1	C12, 16	ECEA1HKA010	1μF, 50V	2
R25	ERJ6GEYJ332V	3.3KΩ	1	C19	ECUV1H223KBX	0.022μF	1
R26	ERJ6GEYJ102V	1KΩ	1	C20	ECUV1H182JX	MULTILAYER CERAMIC CHIP CAPACITOR	1
R27	ERJ6GEYJ682V	6.8KΩ	1	C21	ECUV1H472KBG	0.0047μF	1
R28	ERJ6GEYJ104V	100KΩ	1	C22, 23	ECUV1H333KBX	0.033μF	2
R29	ERJ6GEYJ331V	330Ω	1	C24	ECUV1H470JG	47pF	1
R32~35	ERJ6GEYJ221V	220Ω	4	C28, 31, 34	ECUV1H104ZFX	0.1μF	3
R37	ERJ6GEYJ331V	330Ω	1	C35, 36	ECUV1H101JG	100pF	2
R38, 39	ERJ6GEYJ682V	6.8KΩ	2	C39, 45	ECUV1H104ZFX	0.1μF	2
R42, 43	ERJ6GEYJ563V	56KΩ	2	C50	ECUV1H221JG	220pF	1
R44	ERJ6GEYJ682V	6.8KΩ	1	C51	ECEA1HKN010	1μF, 50V	1
				C52	ECUV1H221JG	220pF	1
				C53, 54	ECEA1HKN010	1μF, 50V	2
				C55	ECUV1H221JG	220pF	1
				C56	ECEA1HKN010	1μF, 50V	1
				C57	ECUV1H221JG	220pF	1
				C60~63, 68, 70, 71, 73~77	ECUV1H104ZFX	0.1μF	12

Ref. No.	Part No.	Description	P/S
C60~63, 68, 70, 71, 73~77	ECUV1H104ZFX	0.1 μ F	12
C79	ECRF1H104ZF	0.1 μ F	1
C80~83, 85~88, 90, 91, 94~96, 100, 101, 103	ECUV1H104ZFX	0.1 μ F	16
C104	ECRF1H104ZF	0.1 μ F	1
C105	ECA1CM101	ALUMINIUM CAPACITOR	1
C106, 107	ECRF1H104ZF	0.1 μ F	2
C108	ECEA1CKA470	47 μ F, 16V	1
C109	EECS5R5V105	1F, 5.5V, MEMORY BACK-UP	1
C110~114	ECUV1H101JG	100pF	5
C116	ECEA0JKA470	47 μ F, 6.3V	1
C118, 120, 123	ECUV1H104ZFX	0.1 μ F	3
C124	ECEA1CKA100	10 μ F, 16V	1
C125, 126	ECUV1H104ZFX	0.1 μ F	2
C127	ECUV1C224KBX	CERAMIC CAPACITOR, MULTI LAYER	1
C129~134	ECUV1H104ZFX	0.1 μ F	6
C135, 136	ECUV1H101JG	100pF	2
C137	ECUV1C224KBX	CERAMIC CAPACITOR, MULTI LAYER	1
C138~141, 144~148	ECUV1H104ZFX	0.1 μ F	9

Ref. No.	Part No.	Description	P/S
RESISTORS			
R2	ERDS2TJ103	10k Ω	1
R3	ERDS2T0	0 Ω , 1/4W	1
R4	ERDS2TJ101	100 Ω	1
R5	ERDS2TJ471	470 Ω	1
R6, 7	ERDS2TJ221	220 Ω	2
R8	ERDS2TJ471	470 Ω	1
R9, 10	ERDS2TJ103	10k Ω	2
R11, 12	ERDS2TJ472	4.7k Ω	2
R13, 14	ERDS2TJ473	47k Ω	2
R15, 16	ERDS2TJ104	100k Ω	2
R17~24, 26~31	ERDS2TJ103	10k Ω	14
R32~37	ERDS2TJ101	100 Ω	6
R38, 39	ERDS2TJ680	68 Ω	2
CAPACITORS			
C1	ECEA0JKA331	330 μ F, 6.3V	1
C2	ECRF1H104ZF	0.1 μ F	1
C3	ECBA1E223ZF	0.022 μ F	1
C4	ECEA0JKA101	100 μ F, 6.3V	1
C7, 8	ECBA1H102KB	0.001 μ F	2
C9~11	ECRF1H104ZF	0.1 μ F	3

CPL CONTROL PANEL LEFT CIRCUIT

Ref. No.	Part No.	Description	P/S
INTEGRATED CIRCUITS			
IC1	M37471M2196S	8BIT MICROCOMPUTER	1
IC2	HD74LS07P	HEX BUFFERS	1
TRANSISTORS			
Q1~6	2SA830SB	TRANSISTOR	6
Q7, 8	2SB621ARS	TRANSISTOR	2
DIODES			
D1~5, 7~14, 18~35, 39, 41~56	MA165	DIODE	48
D100~107, 115, 116, 120~127, 130, 131, 136, 137, 140, 141, 149~155	LN282R	LED (RED)	31
D110~112, 114, 132, 133, 135, 142~144	LN382G	LED (GREEN)	10
OSCILLATOR			
X1	EF0EC4004A3	4MHz, CERAMIC OSCILLATOR	1
SWITCHES			
ESW1	QSRGT002AA	ENCODER SWITCH	1
S1~5, 7~14, 18~35, 41~56	EVQ21507K	PUSH SWITCH	47
VARIABLE RESISTORS			
VR1	QRVG25N01B53	5K Ω B, MAIN	1
VR2	QRVG25N01B53	5K Ω B, RHYTHM	1

CPR CONTROL PANEL RIGHT CIRCUIT

Ref. No.	Part No.	Description	P/S
INTEGRATED CIRCUITS			
IC1	M37471M2196S	8BIT MICROCOMPUTER	1
IC2	HD74LS07P	HEX BUFFERS	1
TRANSISTORS			
Q1~6	2SA830SB	TRANSISTOR	6
Q7~9	2SB621ARS	TRANSISTOR	3
DIODES			
D1~6, 9~15, 17~28, 30~39, 41~47, 49~54, 57~72	MA165	DIODE	64
D100, 110~113, 116, 117, 120~126, 130~136, 148~154	LN282R	LED (RED)	28
D101~107, 140~145	LN382G	LED (GREEN)	13
OSCILLATOR			
X1	EF0EC4004A3	4MHz, CERAMIC OSCILLATOR	1
SWITCHES			
S1~6, 9~15, 17~28, 30~39, 41~47, 49~54, 57~72	EVQ21507K	PUSH SWITCH	64

Ref. No.	Part No.	Description	P/S
RESISTORS			
R1~6	ERDS2TJ101	100Ω	6
R7~9	ERDS2TJ680	68Ω	3
R12~25	ERDS2TJ103	10kΩ	14
R27	ERDS2T0	0Ω, 1/4W	1
R28	ERDS2TJ103	10kΩ	1
R29	ERDS2TJ471	470Ω	1
R30, 31	ERDS2TJ221	220Ω	2
R32	ERDS2TJ471	470Ω	1
R34, 35	ERDS2TJ103	10kΩ	2
CAPACITORS			
C1, 2	ECRF1H104ZF	0.1μF	2
C4	ECEA0JKA470	47μF, 6.3V	1
C5	ECBA1E223ZF	0.022μF	1

INV INVERTER CIRCUIT

Ref. No.	Part No.	Description	P/S
TRANSISTORS			
Q1, 2	2SD592ARS	TRANSISTOR	2
TRANSFORMER			
T1	△ QTDG003A	TRANSFORMER	1
RESISTORS			
R1, 2	ERDS2TJ562	5.6kΩ	2
CAPACITORS			
C1	ECEA0JKA101	100μF, 6.3V	1
C2	ECRF1H104ZF	0.1μF	1
C4	△ ECCD3F180JGE	18pF	1
C5	ECHS1473JZW	0.047μF	1

JACK JACK CIRCUIT

Ref. No.	Part No.	Description	P/S
INTEGRATED CIRCUIT			
IC1	SVIGTLP513	PHOTO COUPLER	1
TRANSISTORS			
S Q1~3	2SA1015-GR	2SA933STRS (SUB. PART)	3
DIODES			
D1, 3, 4, 6, 7	MA165	DIODE	5
COILS			
L1	QLQGT1B600MA	COIL	1
L2~5	QLQGT3T150SA	15μH×3	4
L6	QLZG015A	CORE	1
L7	QLBG002A	0.45μH	1

Ref. No.	Part No.	Description	P/S
JACKS			
JK1	QJSG007AA	PEDAL IN	1
JK2	QJSG016AA	MIDI THRU	1
JK3	QJSG016AA	MIDI OUT	1
JK4	QJSG016AA	MIDI IN	1
JK5	QJJG003AA	AUX IN R	1
JK6	QJJG003AA	AUX IN L	1
JK7	QJJG003AA	LINE OUT R	1
JK8	QJJG003AA	LINE OUT L	1
WIRES			
W1	QEXGRA01005A	WIRE	1
W2	QEXGRA01020E	WIRE	1
W3	QEXGRA01010J	WIRE	1
RESISTORS			
R1, 2	ERDS2TJ102	1kΩ	2
R4	ERDS2TJ473	47kΩ	1
R5~7	ERDS2TJ102	1kΩ	3
R8, 10	ERDS2TJ680	68Ω	2
R11	ERDS2TJ104	100kΩ	1
R13	ERDS2TJ151	150Ω	1
R14	ERDS2TJ330	33Ω	1
R15	ERDS2TJ104	100kΩ	1
R16	ERDS2TJ221	220Ω	1
R17	ERDS2TJ331	330Ω	1
R21, 22	ERDS2TJ681	680Ω	2
CAPACITORS			
C1~4	ECRF1H104ZF	0.1μF	4
C5, 6	ECCR1H221J	220pF	2
C7	ECKR1E473ZV	0.047μF	1
C8	ECRF1H104ZF	0.1μF	1
C11, 12	ECBA1C222MR	0.0022μF	2
C13	ECRF1H104ZF	0.1μF	1
C14, 15	ECBA1C222MR	0.0022μF	2
C16	ECRF1H104ZF	0.1μF	1

PKB PEDAL KEYBOARD CIRCUIT

Ref. No.	Part No.	Description	P/S
TRANSISTORS			
S Q1, 2	2SC1815GR	TRANSISTOR	2
S Q3	2SA1015-GR	2SA933STRS (SUB. PART)	1
DIODE			
D1	GP2S24BC	PHOTO INTERRUPTER	1
SWITCHES			
S1, 2	QSTGT001AA	LEVER SWITCH	2
VARIABLE RESISTOR			
VR1	EVND8AA03B52	500Ω	1

Ref. No.	Part No.	Description	P/S
RESISTORS			
JR1~3	ERDS2T0	0Ω, 1/4W	3
R1	ERDS2TJ181	180Ω	1
R2	ERDS2TJ224	220kΩ	1
R3	ERDS2TJ333	33kΩ	1
R4	ERDS2TJ683	68kΩ	1
R5	ERDS2TJ124	120kΩ	1
R6	ERDS2TJ224	220kΩ	1
R7	ERDS2TJ124	120kΩ	1
R8~10	ERDS2TJ472	4.7kΩ	3
R11	ERDS2T0	0Ω, 1/4W	1
R12	ERDS2TJ391	390Ω	1
R13	ERTD2ZGK102	1KΩ	1
R14	ERDS2TJ222	2.2kΩ	1
CAPACITORS			
C1, 2	ECRF1H104ZF	0.1μF	2
C3	ECQB1H153JF	0.015μF	1

AS AMP & POWER SUPPLY CIRCUIT

Ref. No.	Part No.	Description	P/S
INTEGRATED CIRCUITS			
IC1	△ M5F78M15L	+15V VOLTAGE REGULATOR	1
IC2	△ M5F79M15L	-15V VOLTAGE REGULATOR	1
IC5~10	M5218AL	OPERATIONAL AMPLIFIER	6
TRANSISTORS			
Q1	2SD592ARS	TRANSISTOR	1
Q2	2SB621ARS	TRANSISTOR	1
Q3	2SD592ARS	TRANSISTOR	1
Q4	2SB621ARS	TRANSISTOR	1
S Q5, 6	2SA1015-GR	2SA933STRS (SUB. PART)	2
S Q7, 11, 12	2SC1815GR	TRANSISTOR	3
S Q13	2SA1015-GR	2SA933STRS (SUB. PART)	1
S Q14	2SC1815GR	TRANSISTOR	1
S Q15	2SA1015-GR	2SA933STRS (SUB. PART)	1
○ Q16	△ 2SA1725PY	TRANSISTOR, SI 20MHz 30W	1
○ Q17	△ 2SC4511PY	TRANSISTOR, SI 20MHz 30W	1
S Q18	2SC1815GR	TRANSISTOR	1
S Q19	2SA1015-GR	2SA933STRS (SUB. PART)	1
○ Q20	△ 2SA1725PY	TRANSISTOR, SI 20MHz 30W	1
○ Q21	△ 2SC4511PY	TRANSISTOR, SI 20MHz 30W	1
S Q22	2SA1015-GR	2SA933STRS (SUB. PART)	1
DIODES			
D1, 2	SVDGERA1502	RECTIFIER	2
D3~10	△ SVDS3V20	RECTIFIER	8
D11, 12	MA4180	ZENER, 18V	2
D15	MA165	DIODE	1
D16	EK04	DIODE	1
D19, 20, 27, 28	MA29WA	DIODE	4
D33	EK04	DIODE	1
COILS			
L1	QLQGT3T150SA	15μH×3	1
L4	QLQGT1B800MB	80μH	1

Ref. No.	Part No.	Description	P/S
FUSES			
F4, 5	△ XBA2C20TB0	T2A, 250V, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	2
F4, 5	△ XBA1C25NU100	2.5A, 125V, M MC XM	2
RESISTORS			
R9	ERDS2TJ332	3.3kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R9	ERDS2TJ222	2.2kΩ, M MC XM	1
R10	ERDS2TJ332	3.3kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R10	ERDS2TJ222	2.2kΩ, M MC XM	1
R11	ERDS2TJ222	2.2kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R11	ERDS2TJ152	1.5kΩ, M MC XM	1
R12	ERDS2TJ821	820Ω, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R12	ERDS2TJ331	330Ω, M MC XM	1
R13	ERDS2TJ222	2.2kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R13	ERDS2TJ152	1.5kΩ, M MC XM	1
R14	ERDS2TJ154	150kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R14	ERDS2TJ124	120kΩ, M MC XM	1
R15	ERDS2TJ224	220kΩ	1
R16	ERDS2TJ154	150kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R16	ERDS2TJ124	120kΩ, M MC XM	1
R18	ERDS2TJ821	820Ω, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R18	ERDS2TJ391	390Ω, M MC XM	1
R19	ERDS2TJ124	120kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R19	ERDS2TJ472	4.7kΩ, M MC XM	1
R21	ERDS2TJ152	1.5kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R21	ERDS2TJ681	680Ω, M MC XM	1
R22	ERDS2TJ124	120kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R22	ERDS2TJ104	100kΩ, M MC XM	1

Ref. No.	Part No.	Description	P/S
R25	ERDS2TJ821	820Ω, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R25	ERDS2TJ391	390Ω, M MC XM	1
R26	ERDS2TJ124	120kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R26	ERDS2TJ472	4.7kΩ, M MC XM	1
R27	ERDS2TJ224	220kΩ	1
R28	ERDS2TJ821	820Ω, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R28	ERDS2TJ331	330Ω, M MC XM	1
R31	ERDS2TJ152	1.5kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R31	ERDS2TJ681	680Ω, M MC XM	1
R32	ERDS2TJ124	120kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R32	ERDS2TJ104	100kΩ, M MC XM	1
R39	ERDS2TJ332	3.3kΩ	1
R41, 42	ERDS2TJ334	330kΩ	2
R43	ERDS2TJ220	22Ω	1
R45	ERDS2TJ334	330kΩ	1
R46	ERDS2TJ220	22Ω	1
R47	ERDS2TJ334	330kΩ	1
R48, 49	ERDS2TJ222	2.2kΩ	2
R50, 51	△ ERD2FCVG220	22Ω, 1/4W, FUSE TYPE	2
R52, 53	ERDS2TJ103	10kΩ	2
R54, 55	△ ERQ14AJ2R0	2Ω, 1/4W, FUSE TYPE	2
R56	△ ERD2FCVJ6R8	6.8Ω, 1/4W, FUSE TYPE	1
R57	△ ERD2FCJ6R8	6.8Ω, 1/4W, FUSE TYPE	1
R58~60	ERDS2TJ103	10kΩ	3
R61, 62	ERDS2TJ472	4.7kΩ	2
R78, 79	ERDS2T0	0Ω, 1/4W	2
R80, 81	ERDS2TJ104	100kΩ	2
R83	ERDS2TJ103	10kΩ	1
R84	ERDS2TJ473	47kΩ	1
R85	ERDS2TJ332	3.3kΩ	1
R86	ERDS2TJ154	150kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R86	ERDS2TJ124	120kΩ, M MC XM	1
R89	ERDS2TJ153	15kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R89	ERDS2TJ103	10kΩ, M MC XM	1
R90	ERDS2TJ102	1kΩ	1
R91, 92	ERDS2TJ222	2.2kΩ	2
R93	ER0S2CKF1691	METAL FILM RESISTOR, 1/4W	1
R94, 95	ER0S2CKF1001	1kΩ, ±1%	2
R96, 97	△ ERD2FCVG101	100Ω, 1/4W, FUSE TYPE	2
R98, 99	ERDS2TJ331	330Ω	2
R100	△ ERD25FVJ4R7	4.7Ω, 1/4W, FLAME-PROOF	1
R101	ERDS2TJ154	150kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R101	ERDS2TJ124	120kΩ, M MC XM	1

Ref. No.	Part No.	Description	P/S
R104	ERDS2TJ153	15kΩ, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
R104	ERDS2TJ103	10kΩ, M MC XM	1
R105	ERDS2TJ102	1kΩ	1
R106, 107	ERDS2TJ222	2.2kΩ	2
R108	ER0S2CKF1691	METAL FILM RESISTOR, 1/4W	1
R109, 110	ER0S2CKF1001	1kΩ, ±1%	2
R111	△ ERD2FCVG101	100Ω, 1/4W, FUSE TYPE	1
R112, 113	ERDS2TJ331	330Ω	2
R114	△ ERD2FCVG101	100Ω, 1/4W, FUSE TYPE	1
R115	△ ERD25FVJ4R7	4.7Ω, 1/4W, FLAME-PROOF	1
R116, 117	ERDS2TJ331	330Ω	2
R118	△ ERD2FCVJ6R8	6.8Ω, 1/4W, FUSE TYPE	1
R120, 121	△ ERF5TJ100	10Ω, 5W, FLAME-PROOF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	2
R201, 202	△ ERD25FVJ4R7	4.7Ω, 1/4W, FLAME-PROOF	2

CAPACITORS

C5	ECQG1H682KZ	0.0068μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C5	ECQB1H153JF	0.015μF, M MC XM	1
C6	ECQG1H682KZ	0.0068μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C6	ECQB1H153JF	0.015μF, M MC XM	1
C7	ECQV1H474JM	0.47μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C7	ECQV1H684JM	0.68μF, M MC XM	1
C8	ECQV1H224JM	0.22μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C8	ECQV1H334JM	0.33μF, M MC XM	1
C10	ECQB1H153JF	0.015μF	1
C11	ECQG1H332KZ	0.0033μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C11	ECQG1H682KZ	0.0068μF, M MC XM	1
C12	ECQV1H474JM	0.47μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C12	ECQV1H684JM	0.68μF, M MC XM	1
C13	ECQB1H153JF	0.015μF	1
C14	ECQV1H224JM	0.22μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C14	ECQV1H334JM	0.33μF, M MC XM	1
C16	ECQG1H332KZ	0.0033μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C16	ECQG1H682KZ	0.0068μF, M MC XM	1
C17	ECQV1H683JM	0.068μF, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1

Ref. No.	Part No.	Description	P/S
C17	ECQV1H154JM	0.15 μ F, M MC XM	1
C18	ECQG1H332KZ	0.0033 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C18	ECQV1H683JM	0.068 μ F, M MC XM	1
C19	ECQB1H153JF	0.015 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C19	ECQG1H682KZ	0.0068 μ F, M MC XM	1
C20	ECQG1H152KZ	0.0015 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C20	ECQG1H102KZ	0.001 μ F, M MC XM	1
C21	ECQB1H153JF	0.015 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C21	ECQG1H682KZ	0.0068 μ F, M MC XM	1
C22	ECQG1H152KZ	0.0015 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C22	ECQG1H102KZ	0.001 μ F, M MC XM	1
C23	ECQV1H683JM	0.068 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C23	ECQV1H154JM	0.15 μ F, M MC XM	1
C24	ECQG1H332KZ	0.0033 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C24	ECQV1H683JM	0.068 μ F, M MC XM	1
C25, 26	ECCR1H100D	10pF	2
C29, 31	ECA1VM332	ALUMINIUM CAPACITOR	2
C32	ECA1VM472	4700 μ F, 35V	1
C36, 37	ECRF1H104ZF	0.1 μ F	2
C38	ECEA1CKA100	10 μ F, 16V	1
C39	ECA1CM331	ALUMINIUM CAPACITOR	1
C49	ECQV1H154JM	0.15 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C49	ECQV1H224JM	0.22 μ F, M MC XM	1
C50	ECQB1H223JF	0.022 μ F	1
C51	ECQV1H104JM	0.1 μ F	1
C54	ECQV1H154JM	0.15 μ F, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C54	ECQV1H224JM	0.22 μ F, M MC XM	1
C55	ECQB1H223JF	0.022 μ F	1
C56	ECQV1H104JM	0.1 μ F	1
C59	ECEA50Y47	ALUMINIUM CAPACITOR, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C59	ECEA50Y22	22 μ F, 50V, M MC XM	1
C60	ECEA50Y47	ALUMINIUM CAPACITOR, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C60	ECEA50Y22	22 μ F, 50V, M MC XM	1

Ref. No.	Part No.	Description	P/S
C61	ECEA50Y1R5K	ALUMINIUM CAPACITOR, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C61	ECEA50Y2R2	2.2 μ F, 50V, M MC XM	1
C62	ECEA50Y1R5K	ALUMINIUM CAPACITOR, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
C62	ECEA50Y2R2	2.2 μ F, 50V, M MC XM	1

ACP AC POWER SUPPLY CIRCUIT

Ref. No.	Part No.	Description	P/S
COIL			
L1	QLQGT2T100SA	COIL	1
JACK			
JK1	SJVD0203B	AC INLET	1
SWITCH			
S1	SSRG100A	VOLTAGE SELECTOR, X XS XD XT	1
FUSES			
F1	XBA1C63NU100	6.3A, 125V, M MC XM	1
F1	XBA2C31TB0	T3.15A, 250V, X XS XD XT	1
F2	XBA2C20TB0	T2A, 250V, X XS XD XT	1
F3	XBA2C20TB0	T2A, 250V, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
CAPACITORS			
C1	ECKCVA1472MF	4700pF, LINE CAPACITOR	1
C2	ECQU2A104MN	0.1 μ F, 250V, ACROSS-THE LINE CAPACITOR	1

HP HEADPHONES CIRCUIT

Ref. No.	Part No.	Description	P/S
DIODE			
D1	SEL4214RLC05	LED, POWER INDICATOR	1
COIL			
L1	QLQGT3T150SA	15 μ H $\times$ 3	1
JACKS			
JK1	SJJG100A	HEADPHONE 1	1
JK2	SJJG100A	HEADPHONE 2	1

WIRING PARTS

Ref. No.	Part No.	Description	P/S
WIRE			
W1	QEXGRA01005A	WIRE	1
RESISTORS			
R1~4	ERG1SJ470	47 Ω , 1W, FLAME-PROOF	4
CAPACITORS			
C1, 2	ECKR1E473ZV	0.047 μ F	2
C3	ECRF1H104ZF	0.1 μ F	1

MKB 1 MANUAL KEYBOARD 1 CIRCUIT

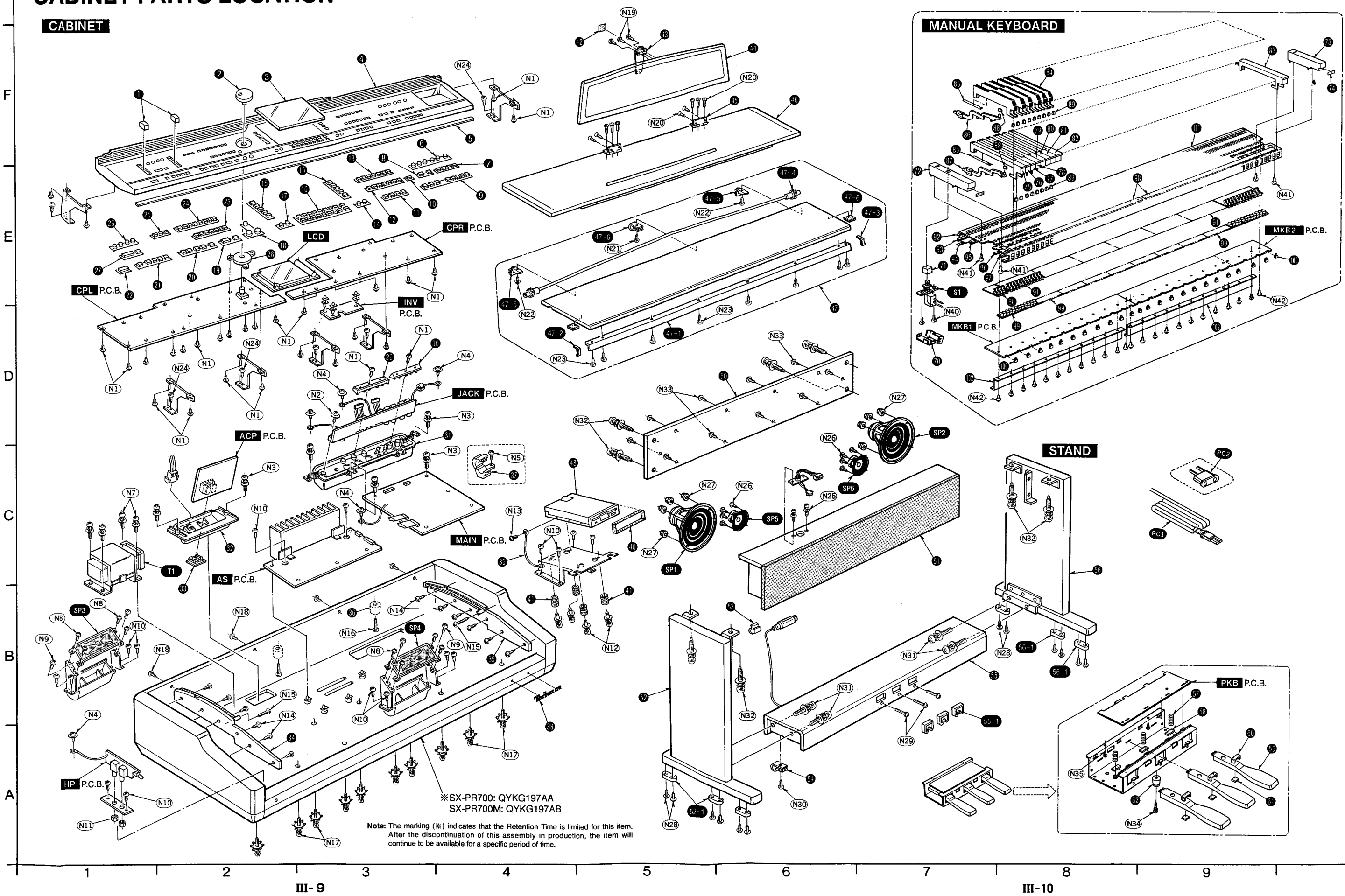
Ref. No.	Part No.	Description	P/S
INTEGRATED CIRCUITS			
IC1	ST93C46CB1	1M BIT PROGRAMMED EEP ROM	1
IC2	HD74LS138P	3 TO 8 DECODER	1
DIODES			
D1~88	MA165	DIODE	88
CAPACITORS			
C1	ECRF1H104ZF	0.1 μ F	1
C2	ECEA0JKA470	47 μ F, 6.3V	1
C3, 4	ECRF1H104ZF	0.1 μ F	2

MKB 2 MANUAL KEYBOARD 2 CIRCUIT

Ref. No.	Part No.	Description	P/S
INTEGRATED CIRCUITS			
IC3, 4	HD74LS138P	3 TO 8 DECODER	2
DIODES			
D89~176	MA165	DIODE	88
CAPACITORS			
C5, 6	ECRF1H104ZF	0.1 μ F	2

CABINET PARTS LOCATION

CABINET



REPLACEMENT PARTS LIST.....Cabinet and Chassis Parts

Notes:

- The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention.
After the end of this period, the assembly will no longer be available.

- mark are new parts.

Cabinet Colour

- SX-PR700..... Black
- SX-PR700M.....Walnut

- Important safety notice

Components identified by **△** mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

- For part No. with area mark, check the area when placing an order.

- The raw material indication for synthetic resin

In order to facilitate classification of parts of synthetic resin manufacture and to promote the recycling of natural resources, a raw material symbol for such parts is indicated in the Ref. No./Material column.

SX-PR700 CABINET & CHASSIS PARTS

Ref. No.	Part No.	Description	P/S
SWITCH			
S1	△ ESB8273V	POWER SWITCH	1
SPEAKERS			
SP1, 2	EAS16PL470A3	16cm, 8Ω	2
SP3, 4	EAS15S09A	SPEAKER, 13×6cm 8Ω	2
SP5, 6	EAS65PH31A3	6.5cm, 8Ω	2
TRANSFORMER			
T1	△ QTPG1N017A	POWER TRANSFORMER, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
T1	△ QTPG1N014A	POWER TRANSFORMER, M MC XM	1
POWER CORD & PLUG			
PC1	△ QJAG013AA	POWER CORD, M MC XM	1
PC1	△ QJAG014AA	POWER CORD, XL XR	1
PC1	△ SJAG65	POWER CORD, EN EZ EW EF EA EP EH X XS XT	1
PC1	△ VJA0733	POWER CORD, EK XD	1
PC2	△ SJP5213-1	ATTACHMENT PLUG, X XT	1
CABINET PARTS			
1	SBNG7050A	KNOB	2
2	ABS QGUG3002BB	DIAL WHEEL	1
3	QKWG028AA	PLATE	1
4	PS QGPG0118BB	CONTROL PANEL	1
5	QMFG1140AA	FELT	1
6	QGUG1357BA	PUSH BUTTON	1
7	QGUG1358AA	PUSH BUTTON	1
8	QGUG1359CA	PUSH BUTTON	1
9	QGUG1362CA	PUSH BUTTON	1
10	QGUG1352CA	PUSH BUTTON	1
11	QGUG1432AA	PUSH BUTTON	1
12	QGUG1360CA	PUSH BUTTON	1
13	QGUG1359DA	PUSH BUTTON	1
14	QGUG1357CA	PUSH BUTTON	1
15	QGUG1434AA	PUSH BUTTON	2
16	QGUG1431AA01	PUSH BUTTON	1
17	QGUG1354AB	PUSH BUTTON	1
18	QGUG1351AB01	PUSH BUTTON	1
19	QGUG1433AA	PUSH BUTTON	1

SX-PR700M CABINET & CHASSIS PARTS

Ref. No.	Part No.	Description	P/S
SWITCH			
S1	△ ESB8273V	POWER SWITCH	1
SPEAKERS			
SP1, 2	EAS16PL470A3	16cm, 8Ω	2
SP3, 4	EAS15S09A	SPEAKER, 13×6cm 8Ω	2
SP5, 6	EAS65PH31A3	6.5cm, 8Ω	2
TRANSFORMER			
T1	△ QTPG1N017A	POWER TRANSFORMER, EN EK EZ EW EF EA EP EH X XL XR XS XD XT	1
T1	△ QTPG1N014A	POWER TRANSFORMER, M MC XM	1
POWER CORD & PLUG			
PC1	△ QJAG013AA	POWER CORD, M MC XM	1
PC1	△ QJAG014AA	POWER CORD, XL XR	1
PC1	△ SJAG65	POWER CORD, EN EZ EW EF EA EP EH X XS XT	1
PC1	△ VJA0733	POWER CORD, EK XD	1
PC2	△ SJP5213-1	ATTACHMENT PLUG, X XT	1
CABINET PARTS			
1	SBNG7050A	KNOB	2
2	ABS QGUG3002BB	DIAL WHEEL	1
3	QKWG028AA	PLATE	1
4	PS QGPG0118BB	CONTROL PANEL	1
5	QMFG1140AA	FELT	1
6	QGUG1357BA	PUSH BUTTON	1
7	QGUG1358AA	PUSH BUTTON	1
8	QGUG1359CA	PUSH BUTTON	1
9	QGUG1362CA	PUSH BUTTON	1
10	QGUG1352CA	PUSH BUTTON	1
11	QGUG1432AA	PUSH BUTTON	1
12	QGUG1360CA	PUSH BUTTON	1
13	QGUG1359DA	PUSH BUTTON	1
14	QGUG1357CA	PUSH BUTTON	1
15	QGUG1434AA	PUSH BUTTON	2
16	QGUG1431AA01	PUSH BUTTON	1
17	QGUG1354AB	PUSH BUTTON	1
18	QGUG1351AB01	PUSH BUTTON	1
19	QGUG1433AA	PUSH BUTTON	1

Ref. No.	Part No.	Description	P/S
○ 20	QGUG1356BA	PUSH BUTTON	1
○ 21	QGUG1353BA	PUSH BUTTON	1
○ 22	QGUG1361AB	PUSH BUTTON	1
23	QGUG1349AA	PUSH BUTTON	1
24	QGUG1350AA	PUSH BUTTON	1
○ 25	QGUG1348BA	PUSH BUTTON	1
○ 26	QGUG1347AB	PUSH BUTTON	1
○ 27	QGUG1352BA	PUSH BUTTON	1
○ 28	PS QMRG7077AA	DIAL WHEEL CASE	1
29	QMRG7029AC	BRACKET	1
30	QMRG7028AC	BRACKET	1
31	QGKG0076BB	EXTERNAL JACK PANEL	1
32	QGKG0096AC	AC JACK PANEL, EN M MC EK EZ EW EF EA EP EH XL XR XM	1
32	QGKG0096BB	AC JACK PANEL, X XS XD XT	1
33	△ SJS9231A	AC INLET COVER, EN EK EZ EW EF EA EP EH X XS XD XT	1
33	△ SJS9334A	AC INLET COVER, M MC XL XR XM	1
○ 34	PS QKSGG020AA	GUIDE	1
○ 35	PS QKSGG021AA	GUIDE	1
36	QKAG0012AA	FOOT	2
37	QLZG006A	CORE	1
38	SGBG160B	BADGE	1
○ 39	QEXGRA01007H	WIRE	1
○ 40	QMFG1220AA	FELT	1
41	QMGG029AA	FLOATING RUBBER	4
42	QMFG1083AB	FELT	1
43	SBLG7-2	STAY	1
44	QGAG1026AB	MUSIC RACK	1
45	SBHG5003-2	HINGE	2
○ 46	QKQGA104AA	TOP COVER	1
○ 47	QKQGF022AC	KEYBOARD COVER ASS'Y	1
47-1	QGKG0095AD	ORNAMENT	1
47-2	QMRG7031CC	PROTECTOR	1
47-3	QMRG7032CC	PROTECTOR	1
47-4	QXQG007AA	AXLE TREE	1
47-5	QMRG7056AA	HOLDER	2
47-6	QWBG002AA	HOLDER	1
47-7	QMFG1155AA	FELT	2
48	△ QAUG012AA	DDR DRIVE UNIT	1

STAND

○ 50	QKUG1041AAK	SPEAKER BOX REAR BOARD	1
○ 51	QYKG199AAK	SPEAKER BOX	1
○ 52	QKQGB397AA	LEFT PLANK ASS'Y	1
52-1	PP [SHRG2130B-K	FOOT	3
53	SHRG9620A	CORD CLAMPER	3
54	SHRG1230A	CORD CLAMPER	1
○ 55	QKQGM072AA	PEDAL BOX ASS'Y	1
55-1	ABS [QGKG0113AA	ORNAMENT	3
○ 56	QKQGB399AA	RIGHT PLANK ASS'Y	1
56-1	PP [SHRG2130B-K	FOOT	3
57	QMBG009AA	SPRING	3
58	QMFG1133AA	FELT	3
59	QMWG4002AA	PEDAL ARM	3
60	QMFG1134AA	FELT	3
61	QMFG1135AA	FELT	3
62	QKAG0011AA	FOOT	1

MANUAL KEYBOARD

70	PP △ SHRG8390A	COVER, POWER SW	1
71	ABS QGUG1040AA	BUTTON, POWER SWITCH	1
72	PS QGPG0041BB	END COVER PANEL, RIGHT	1
73	PS QGPG0042AB	END COVER PANEL, LEFT	1

Ref. No.	Part No.	Description	P/S
○ 20	QGUG1356BA	PUSH BUTTON	1
○ 21	QGUG1353BA	PUSH BUTTON	1
○ 22	QGUG1361AB	PUSH BUTTON	1
23	QGUG1349AA	PUSH BUTTON	1
24	QGUG1350AA	PUSH BUTTON	1
○ 25	QGUG1348BA	PUSH BUTTON	1
○ 26	QGUG1347AB	PUSH BUTTON	1
○ 27	QGUG1352BA	PUSH BUTTON	1
○ 28	PS QMRG7077AA	DIAL WHEEL CASE	1
29	QMRG7029AC	BRACKET	1
30	QMRG7028AC	BRACKET	1
31	QGKG0076BB	EXTERNAL JACK PANEL	1
32	QGKG0096AC	AC JACK PANEL, EN M MC EK EZ EW EF EA EP EH XL XR XM	1
32	QGKG0096BB	AC JACK PANEL, X XS XD XT	1
33	△ SJS9231A	AC INLET COVER, EN EK EZ EW EF EA EP EH X XS XD XT	1
33	△ SJS9334A	AC INLET COVER, M MC XL XR XM	1
○ 34	PS QKSGG020AA	GUIDE	1
○ 35	PS QKSGG021AA	GUIDE	1
36	QKAG0012AA	FOOT	2
37	QLZG006A	CORE	1
38	SGBG160B	BADGE	1
○ 39	QEXGRA01007H	WIRE	1
○ 40	QMFG1220AA	FELT	1
41	QMGG029AA	FLOATING RUBBER	4
42	QMFG1083AB	FELT	1
43	SBLG7-2	STAY	1
44	QGAG1026AA	MUSIC RACK	1
45	SBHG5003-2	HINGE	2
○ 46	QKQGA104AB	TOP COVER	1
○ 47	QKQGF022AD	KEYBOARD COVER ASS'Y	1
47-1	QGKG0095AC	ORNAMENT	1
47-2	QMRG7031CC	PROTECTOR	1
47-3	QMRG7032CC	PROTECTOR	1
47-4	QXQG007AA	AXLE TREE	1
47-5	QMRG7056AA	HOLDER	2
47-6	QWBG002AA	HOLDER	1
47-7	QMFG1155AA	FELT	2
48	△ QAUG012AA	DDR DRIVE UNIT	1

STAND

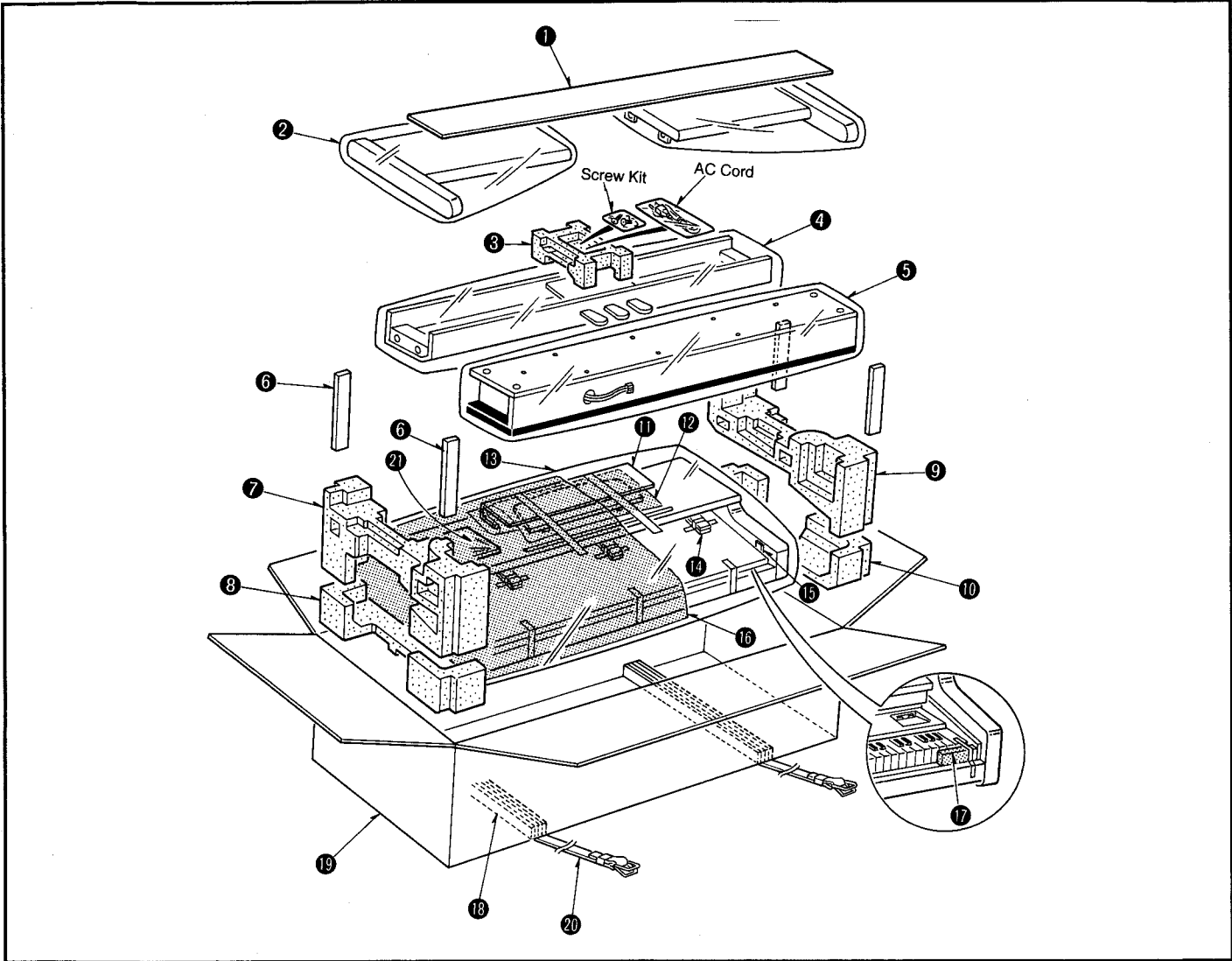
○ 50	QKUG1041ABK	SPEAKER BOX REAR BOARD	1
○ 51	QYKG199ABK	SPEAKER BOX	1
○ 52	QKQGB397AB	LEFT PLANK ASS'Y	1
52-1	PP [SHRG2130B-K	FOOT	3
53	SHRG9620A	CORD CLAMPER	3
54	SHRG1230A	CORD CLAMPER	1
○ 55	QKQGM072AB	PEDAL BOX ASS'Y	1
55-1	ABS [QGKG0113AA	ORNAMENT	3
○ 56	QKQGB399AB	RIGHT PLANK ASS'Y	1
56-1	PP [SHRG2130B-K	FOOT	3
57	QMBG009AA	SPRING	3
58	QMFG1133AA	FELT	3
59	QMWG4002AA	PEDAL ARM	3
60	QMFG1134AA	FELT	3
61	QMFG1135AA	FELT	3
62	QKAG0011AA	FOOT	1

MANUAL KEYBOARD

70	PP △ SHRG8390A	COVER, POWER SW	1
71	ABS QGUG1040AA	BUTTON, POWER SWITCH	1
72	PS QGPG0041BB	END COVER PANEL, RIGHT	1
73	PS QGPG0042AB	END COVER PANEL, LEFT	1

Ref. No.	Part No.	Description	P/S	Ref. No.	Part No.	Description	P/S
74	QMFG1104AA	FELT	2	74	QMFG1104AA	FELT	2
75	AS QMWG1001AB	WHITE KEY (FIRST OCTAVE A KEY)	1	75	AS QMWG1001AB	WHITE KEY (FIRST OCTAVE A KEY)	1
76	AS QMWG1002AB	WHITE KEY (B KEY)	8	76	AS QMWG1002AB	WHITE KEY (B KEY)	8
77	AS QMWG1003AB	WHITE KEY (C KEY)	7	77	AS QMWG1003AB	WHITE KEY (C KEY)	7
78	AS QMWG1004AB	WHITE KEY (D KEY)	7	78	AS QMWG1004AB	WHITE KEY (D KEY)	7
79	AS QMWG1005AB	WHITE KEY (E KEY)	7	79	AS QMWG1005AB	WHITE KEY (E KEY)	7
80	AS QMWG1006AB	WHITE KEY (F KEY)	7	80	AS QMWG1006AB	WHITE KEY (F KEY)	7
81	AS QMWG1007AB	WHITE KEY (G KEY)	7	81	AS QMWG1007AB	WHITE KEY (G KEY)	7
82	AS QMWG1008AB	WHITE KEY (A KEY)	7	82	AS QMWG1008AB	WHITE KEY (A KEY)	7
83	AS QMWG1009AB	WHITE KEY (TOP OCTAVE C KEY)	1	83	AS QMWG1009AB	WHITE KEY (TOP OCTAVE C KEY)	1
84	AS QMWG2001AC	BLACK KEY	36	84	AS QMWG2001AC	BLACK KEY	36
85	SUSG534A	SPRING	88	85	SUSG534A	SPRING	88
86	QMWG8019CA	HAMMER (BLACK KEY)	36	86	QMWG8019CA	HAMMER (BLACK KEY)	36
87	QMWG8017DA	HAMMER (WHITE KEY)	52	87	QMWG8017DA	HAMMER (WHITE KEY)	52
88	SHGG9121A	RUBBER CAP (HAMMER)	88	88	SHGG9121A	RUBBER CAP (HAMMER)	88
89	PA QMWG8024BA	KEY GUIDE	88	89	PA QMWG8024BA	KEY GUIDE	88
90	ABS QMWG8022AA	FULCURUM (4PCS.ON ONE)	1	90	ABS QMWG8022AA	FULCURUM (4PCS.ON ONE)	1
91	ABS QMWG8021AA	FULCURUM (12PCS.ON ONE)	7	91	ABS QMWG8021AA	FULCURUM (12PCS.ON ONE)	7
92	SHRGA9080A	SPONGE	2	92	SHRGA9080A	SPONGE	2
93	QMF1073AA	FELT	2	93	QMF1073AA	FELT	2
94	SHSG3461A	FELT	1	94	SHSG3461A	FELT	1
95	QMF1101AA	FELT	2	95	QMF1101AA	FELT	2
96	QMF1061AA	FELT	2	96	QMF1061AA	FELT	2
97	QMF1060AA	FELT	2	97	QMF1060AA	FELT	2
98	QMF1086AA	FELT	2	98	QMF1086AA	FELT	2
99	QMWG6006AAK	RUBBER SWITCH (8PCS.ON ONE)	11	99	QMWG6006AAK	RUBBER SWITCH (8PCS.ON ONE)	11
100	SHRG9751A	P.C.B.HOLDER	24	100	SHRG9751A	P.C.B.HOLDER	24
101	QMWG3003CA	CHASSIS	1	101	QMWG3003CA	CHASSIS	1
102	SUWG3157A	ANGLE	2	102	SUWG3157A	ANGLE	2
SCREWS & WASHERS				SCREWS & WASHERS			
N1	XTW3+10Q	SCREW	44	N1	XTW3+10Q	SCREW	44
N2	XTWSG2	SCREW WITH WASHER	1	N2	XTWSG2	SCREW WITH WASHER	1
N3	XYN4+F25	SCREW WITH WASHER	6	N3	XYN4+F25	SCREW WITH WASHER	6
N4	SNEG2660A	SCREW	5	N4	SNEG2660A	SCREW	5
N5	XTB3+10A	SCREW	1	N5	XTB3+10A	SCREW	1
N7	XYN4+F16	SCREW WITH WASHER	4	N7	XYN4+F16	SCREW WITH WASHER	4
N8	XTW3+8J	SCREW	8	N8	XTW3+8J	SCREW	8
N9	XTB4+10C	SCREW	4	N9	XTB4+10C	SCREW	4
N10	XTB35+12A	SCREW	16	N10	XTB35+12A	SCREW	16
N11	XNS12FZ	NUT	2	N11	XNS12FZ	NUT	2
N12	QHDG043AA	SCREW WITH WASHER	4	N12	QHDG043AA	SCREW WITH WASHER	4
N13	XYN3+F6	SCREW WITH WASHER	1	N13	XYN3+F6	SCREW WITH WASHER	1
N14	XTB35+16A	SCREW	12	N14	XTB35+16A	SCREW	12
N15	XTN4+50AFZ	SCREW	2	N15	XTN4+50AFZ	SCREW	2
N16	XTB35+20A	SCREW	2	N16	XTB35+20A	SCREW	2
N17	QHDG021AA	SCREW WITH WASHER	10	N17	QHDG021AA	SCREW WITH WASHER	10
N18	XTT4+30AFZ	SCREW	4	N18	XTT4+30AFZ	SCREW	4
N19	XTB3+10AFZ	SCREW	3	N19	XTB3+10AFZ	SCREW	3
N20	XTS3+10AFZ	SCREW	10	N20	XTS3+10AFZ	SCREW	10
N21	XTT4+12AFZ	SCREW	1	N21	XTT4+12AFZ	SCREW	1
N22	XTB4+10B	SCREW	2	N22	XTB4+10B	SCREW	2
N23	XTT4+10A	SCREW	8	N23	XTT4+10A	SCREW	8
N24	XTT4+12A	SCREW	6	N24	XTT4+12A	SCREW	6
N25	QHDG004AA	SCREW	2	N25	QHDG004AA	SCREW	2
N26	XTT4+12A	SCREW	8	N26	XTT4+12A	SCREW	8
N27	SNE499-1	NUT	8	N27	SNE499-1	NUT	8
N28	XTW3+16JFZ	SCREW	12	N28	XTW3+16JFZ	SCREW	12
N29	XYN4+F16FZ	SCREW WITH WASHER	3	N29	XYN4+F16FZ	SCREW WITH WASHER	3
N30	XTB35+14A	SCREW	1	N30	XTB35+14A	SCREW	1
N31	QHDG032AB	SCREW WITH WASHER	4	N31	QHDG032AB	SCREW WITH WASHER	4
N32	QHDG016AB	SCREW WITH WASHER	8	N32	QHDG016AB	SCREW WITH WASHER	8
N33	XTT4+25AFZ	SCREW	10	N33	XTT4+25AFZ	SCREW	10
N34	XTN4+16F	SCREW WITH WASHER	1	N34	XTN4+16F	SCREW WITH WASHER	1
N35	XTT4+16A	SCREW	2	N35	XTT4+16A	SCREW	2
N40	XTV3+10C	SCREW	2	N40	XTV3+10C	SCREW	2
N41	XTB4+12A	SCREW	4	N41	XTB4+12A	SCREW	4
N42	XTW3+10T	SCREW	14	N42	XTW3+10T	SCREW	14

PACKING



PACKING PARTS

Ref. No.	Part No.	Description	P/S	Ref. No.	Part No.	Description	P/S
PACKING PARTS				OPERATING INSTRUCTION MANUAL			
○ 1	QPGG0355AA	PROTECTION CARDBOARD	1	○ 21	QQFGPR900RAA	OPERATING INSTRUCTION MANUAL, EN EK EP X XL XR XS XD	1
○ 2	QPF006AA	POLYETHYLENE BAG	2			XT XM	
○ 3	QPNG0594AA	PAD	1	○ 21	QQFGPR900RBA	OPERATING INSTRUCTION MANUAL, M	1
○ 4	QPF026AA	POLYETHYLENE BAG	1	○ 21	QQFGPR900RCA	OPERATING INSTRUCTION MANUAL, MC EF	1
○ 5	QPF012AA	POLYETHYLENE BAG	1	○ 21-1	QQTG0414A	ENGLISH	1
○ 6	QPQG042AB	PROP	4	○ 21-2	QQTG0416A	FRANCAIS	1
○ 7	QPNG0590AA	PAD	1	○ 21	QQFGPR900RDA	OPERATING INSTRUCTION MANUAL, E2	1
○ 8	QPNG0592AA	PAD	1	○ 21	QQFGPR900REA	OPERATING INSTRUCTION MANUAL, EW	1
○ 9	QPNG0591AA	PAD	1	○ 21-1	QQTG0416A	FRANCAIS	1
○ 10	QPNG0593AA	PAD	1	○ 21-2	QQTG0417A	DEUTSCH	1
○ 11	QPGG0358AA	PAD	1	○ 21	QQFGPR900RFA	OPERATING INSTRUCTION MANUAL, EA	1
○ 12	SPHG2240A	PROTECTION SHEET	1	○ 21	QQFGPR900RGA	OPERATING INSTRUCTION MANUAL, EH	1
○ 13	QPF013AA	POLYETHYLENE BAG	1	○ 21-1	QQTG0418A	NERDERLANDS	1
○ 14	SPNG5161A	SPACER	3	○ 21-2	QQTG0416A	FRANCAIS	1
○ 15	SHSG2090A	FELT	2	○ 21-3	QQTG0417A	DEUTSCH	1
○ 16	QPHG028AA	PROTECTION SHEET	1				
○ 17	QPNG0556AA	SPACER	2				
○ 18	QPNG0600AA	PAD	2				
○ 19	QPGG0351AA	PACKING CASE, PAPER, SX-PR700	1				
○ 19	QPGG0351AB	PACKING CASE, PAPER, SX-PR700M	1				
○ 20	SPSG40A	BAND	2				